

State Emergency Medical Services Systems: A Model

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By:

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I. Introduction and Purpose

Milestone documents in the early development of Emergency Medical Services Systems (EMSS) have included the National Academy of Sciences-National Research Council White Paper “*Accidental Death and Disability: The Neglected Disease of Modern Society*”, the federal Highway Safety Act of 1966, and the federal Emergency Medical Services (EMS) Systems Act of 1973. They guided the first thirty years of booming Emergency Medical Services System growth on the local, regional and state levels. Assisting in organized regional and, to a lesser degree, state system growth was significant funding provided by a large federal Health and Human Services (USDHHS) emergency medical services agency under the 1973 EMSS Act. Both the EMS agency and its categorical funding for EMS were eliminated in the early 1980’s.

The National Highway Traffic Safety Administration’s Emergency Medical Services program (NHTSA EMS) has provided state and local system development support since the late 1960’s. It has innovated programs such as the state EMS system Technical Assistance Team evaluation process and, with its federal partners, created the visionary 1996 *EMS Agenda for the Future*. The “EMS for Children” and the “Trauma System” programs in USDHHS have also provided system development support over the years.

This history contributed to an environment of varying focus of resources and guidance on the development of state EMS systems. As a result, state systems have evolved inconsistently across the country. Some have mature networks of leadership connecting state, regional and local systems with broad responsibility for all aspects of emergency care. Others have narrow responsibility for the regulation of certain aspects of prehospital EMS providers.

A recent report by the Institutes of Medicine (IOM) underscores that:

“In states and regions across the country, there is substantial variation among emergency and trauma care systems. These systems differ along a number of dimensions, such as the level of development of trauma systems, the effectiveness of state EMS offices and regional EMS councils, and the degree of coordination between fire, EMS, hospitals, trauma centers, and emergency management.”¹ And, as a result:

“...today the system is more fragmented than ever, and the lack of effective coordination and accountability stand in the way of further progress and improved quality of care. EMS has an opportunity to move toward a more integrated and accountable system through fundamental, systemic changes. Or it can continue on its current path and risk further entrenchment of the fragmentation that stands in the way of system improvement.”²

The premise of the Model State Emergency Medical Services System Project accepts the challenge of these observations.

The 1973 EMS System Act described an “EMS system” very broadly to include a system for preventing emergent illness and injury and, where these could not be prevented, for mitigating their impact through emergency, acute and rehabilitative patient care including all subsystems of care such as emergency cardiac and trauma care. This original definition has become less clear with time. Some have come to define EMS as essentially only the prehospital phase of emergency care.

The Project’s Steering Group recognizes the IOM’s concept of “emergency care system” as being in essence what the EMS Systems Act construed to be the broadly defined “EMS system”. One purpose of the Project is to reinforce this broader definition of EMSS and the notion that state offices of EMS can be broadly effective leaders of such systems. This is especially important as EMS evolves and innovates to meet the changing needs of an aging population.

The Project approaches these challenges through a multi-year process of developing the following products to assist in state EMS system development:

- **Year 1 (Calendar 2007)**
 - **Model State Emergency Medical Services System.** This is a description of the idealized state emergency medical services system. It is organized in ten subsystems which generally reflect the evolution of thinking about the components and attributes of the EMS system. These have ranged from the original “15 components” of the EMSS Act of 1973 through the 10 components of the NHTSA Technical Assistance Team state EMS evaluation process, and the 14 components or attributes of the 1996 *EMS Agenda for the Future*. Each subsystem is then considered by the three core functions of public health system planning: assessment processes, policy processes, and assurance processes. The descriptions of each core function are based on the “highest” scoring (“5” on a “0 to 5” scale) descriptions for indicators of each as found in the State Emergency Medical Services System Self-Assessment tool (below).
 - **State Emergency Medical Services System Self-Assessment.** This is a guide to rating the strengths and weaknesses of the state emergency medical services system. For each subsystem, indicators have been developed and arranged by the three core public health functions (assessment processes, policy processes, and assurance processes) and by the “ten essential services” of public health which have been adapted for this tool (for more information on public health planning applications in EMS, please see the USDHHS Trauma Program document *Model Trauma System Planning and Evaluation*, pages 18 to 32). These indicators recognize that a state EMS system should be a planned and coordinated organization of local, regional and state EMS capabilities on a statewide

- **Model State Emergency System Planning Process.** This is a brief discussion of the process for implementing the Self-Assessment and then incorporating the results into an EMSS plan for the state.
- **Year 2 (and Beyond)**
 - **State Officials Toolbox to Implementing the Model State EMS System Plan.** This is a set of guidance tools to assist state emergency medical services system officials in implementing the state emergency medical services system plan. These include:
 - (Year 2) **The State of Emergency Medical Services System Model Office.** This will describe the idealized office, functions, staff, and responsibilities of the lead agency for the broadly defined state emergency medical services system.
 - (Year 2) **State Emergency Medical Services System Model Legislation.** This will be model state legislation to establish, authorize, fund and operate a state EMS system.
 - (Year 3 and beyond) **“Rainbow Series” of State EMS System Guidance Tools.** These will be guidance documents for state EMS planners on a variety of topics dictated by contemporary need. These might include:
 - Integrating Within the State Highway Strategic Plan
 - Using NEMSIS Effectively in System Development
 - Providing Effective Local Technical and Funding Support in an Era of Changing Emergency Medical Services System Provider Types and Self-Sufficiency
 - Integrating EMS Communications Planning in Statewide Interoperable Systems
 - Role of State Emergency Care Medical Directors
 - The Public Health Approach to Emergency Medical Services System Planning and Implementation
 - Revised Curriculum for NASEMSO “New Directors Boot Camp”

II. Model, Self-Assessment, Planning and Implementation

A. Model State Emergency Medical Services System

The model state EMS System (EMSS) broadly encompasses the emergent illness or injury event from its prevention, where possible, to its mitigation. Its mitigation includes not only prehospital phases of intervention, but care in the emergency department as well as specialty and rehabilitation facilities. It includes an array of specialty care disciplines such as trauma, cardiac, pediatric, and mass casualty care. The system's goal is to reduce morbidity, mortality, long-term impact, and cost to society.

The model state EMS system is organized into ten subsystems. These ten reflect a natural evolution of thinking about the components and attributes of the EMS system starting with the "original 15 components" of the EMSS Act of 1973. Other updates of the "original 15" include the NHTSA Technical Assistance Team state EMS evaluation process with 10 components, and the 14 components or attributes of the 1996 *EMS Agenda for the Future*. The ten subsystems include:

1. System Leadership, Organization, Regulation & Policy Subsystem
2. Resource Management Subsystems – Financial
3. Resource Management Subsystems - Human Resources
4. Resource Management Subsystems – Transportation
5. Resource Management Subsystems – Facility and Specialty Care Regionalization
6. Public Access and Communications Subsystems
7. Public Information, Education and Prevention Subsystem
8. Clinical Care, Integration of Care, and Medical Direction
9. Information, Evaluation, and Research Subsystem
10. Large Scale Event Preparedness and Response Subsystem

The *Model Trauma System Planning and Evaluation (MTSPE)* document published by the USDHHS Trauma Program in 2006, introduced the concept of using public health planning concepts in EMS. It wove trauma system planning, implementation and evaluation around the "three core functions" of public health planning:

- Assessment
- Policy Development
- Assurance

It further utilized "ten essential services" to further refine these concepts:

1. Monitor health status to identify community health problems
2. Diagnose and investigate health problems and health hazards in the community
3. Inform, educate, and empower people about health issues
4. Mobilize community partnerships to identify and solve health problems
5. Develop policies and plans that support individual and community health efforts
6. Enforce laws and regulations that protect health and ensure safety

7. Link people to needed personal health services and ensure the provision of health care when otherwise unavailable
8. Ensure a competent public health and personal health care workforce
9. Evaluate effectiveness, accessibility, and quality of personal and population-based health services
10. Conduct research to attain new insights and innovative solutions to health problems

In the *MTSPE* approach, the traditionally used EMS “component” approach to planning is replaced, by and large, by the public health methodology/terminology.

In the Model State EMS System Project, the traditional EMS component approach and the public health approach are integrated. In doing so, both the components traditionally used and some of the public health “ten essential services” were adapted or eliminated as portrayed in Table 1, below.

Table 1

Process: Core Functions	Structure: Emergency Medical Services System Categorical Components									
	System Leadership, Organization, Regulation & Policy Subsystem	Financial	Human	Transportation	Facility & Specialty Care Regionalization	Public Access & Communications Subsystem	Public Information, Education & Prevention Subsystem	Clinical Care, Integration of Care, & Medical Direction, Subsystem	Information, Evaluation, & Research Subsystems	Large Scale Emergency Preparedness & Response Subsystem
Assessment Process										
1. Monitor										
2. Diagnose/ Investigate										
Policy Process										
1. Inform & Organize										
2. Develop Policies										
Assurance Process										
1. Enforce Policies										
2. Provide Services										
3. Evaluate										

The model state EMS system described in this section and the state EMS self-assessment in the next section are organized in this format.

The state EMS system self-assessment tool has 75 indicators. In each indicator, the element of the system and subsystem being considered may be judged from “0” to “5” based on the completeness and maturity of that element. The lower the score, the less complete or mature that element of the system is judged to be (or “0” is given if the element’s status is not known). The statements associated with a “top” score of “5” have been designed by the Project Steering Group to reflect the most mature and complete

status for that element of the system. Therefore, the following “model” state EMS system description is based on compiling those highest scoring statements of the 75 indicators organized by the 10 subsystems of the state EMS system. The model description has been altered somewhat from the specific scoring statements in the self-assessment tool for readability.

1. System Leadership, Organization, Regulation & Policy Subsystem

Overview

A single state agency is statutorily charged with the comprehensive leadership, development and regulation of the Emergency Medical Services System (EMSS). It has developed the EMSS based on statewide regionalized, coordinated and accountable systems of emergency care and has the authority and funding to lead these. It utilizes a multi-disciplinary, multi-agency, broadly representative stakeholder body and committee structure in the development of the EMSS. The agency has routine and direct access to its cabinet level policy-maker.

Components

A. Assessment

There are clearly defined statewide regionalized, coordinated and accountable systems of emergency care. These have regional infrastructures established uniformly under the state EMSS lead agency by statute, rules, regulations, protocols or other policies to guide and monitor care. These regionalized, coordinated and accountable systems of emergency care routinely and uniformly report on care performance through the state EMSS lead agency.

There is an independent external assessment of the EMSS at least every five years. In substitution for this, a broad-based statewide quality improvement process may be employed on an on-going fashion. Whichever process is used utilizes the Model EMSS self-assessment as a basis. The assessment process is linked with a strategic planning process to update the EMSS plan.

B. Policy Development

The lead agency has brought together multiple stakeholder groups and other state agencies to assist with, and make recommendations on, the development and implementation of the EMSS. Ideally, this is accomplished through a statewide, statutorily authorized, multidisciplinary, multi-agency body acting in an advisory or authority capacity. There is evidence that the needs of pediatric and other special populations have been integrated into state statutes, rules, and regulations and are represented on this body.

The lead agency, state EMS director, and state EMS medical director are identified in State statute. The lead agency is authorized to plan, develop, lead, monitor and regulate a comprehensive statewide EMSS system. This system is specified as including a statewide organization of regionalized, coordinated and accountable systems of emergency care with the component subsystems described in the model EMSS. The lead agency is required to regularly report on the progress and effectiveness of system implementation based on a quality improvement process.

The lead agency regularly reviews, through established committees and stakeholders, the rules/regulations governing system performance, including policies and procedures for system operations at the State, regional, and local levels.

The lead agency has adopted clearly defined EMSS standards (e.g., facility standards, triage and transfer guidelines, data collection standards) and has sufficient legal authority to ensure and enforce compliance. These EMSS performance standards are in place and compliance is being actively monitored and enforced through well-defined policies and procedures.

Lead agency leaders, in consultation with their statewide multidisciplinary, multi-agency body, have established measurable program goals and outcome-based, time-specific, quantifiable, and measurable objectives that guide system effectiveness and system performance.

A comprehensive EMSS plan has been developed and adopted in conjunction with all key EMSS stakeholders, and includes the integration of all subsystem components. This plan is linked to the Strategic Highway Safety Plan to ensure that EMSS information is used to evaluate highway safety problems and to improve post crash care and survivability.

C. Assurance

The EMSS lead agency maintains ongoing EMSS performance improvement processes and enforces prehospital agency compliance with all rules, regulations, or protocols (e.g., taking patients to the correct facility in accordance with pre-existing destination protocols).

The EMSS lead agency provides an array of services addressing system needs such as leadership, planning, coordination, implementation, response and technical assistance. It performs an internal or external examination of the EMSS including an assessment of needs for such services at least every five years. Such an assessment may be replaced by a system of performance improvement which generates data sufficient to evaluate needs and update services on an on-going basis.

Comprehensive annual reports on the status of the statewide EMSS, including the effectiveness of all subsystems, are written by the lead agency in conjunction with providers and other stakeholders. These routinely report state emergency medical services system information system (EMSIS) data and performance measures derived from this self-assessment tool and integrate comparisons with similar states through National Emergency Medical Services Information System (NEMSIS) data.

2. Resource Management Subsystems – Financial

Overview

The EMSS infrastructure, including its lead agency, is adequately funded. Mechanisms exist to assure adequate payment for emergency care and to maintain the prehospital EMS safety net. There is effective integration of emergency care, primary care, specialty care and other patient preventive and treatment services and the mechanisms for reimbursement for these services provides incentives for this integration..

Components

A. Assessment

The lead agency routinely utilizes strategic planning processes, with broad-based stakeholder representation and participation, to develop its budget for the EMSS and its subsystems. The strategic planning processes utilize data from state EMSS evaluations and/or specific statewide needs assessment processes. Regardless of which of these sources of overall baseline information is used, the planning process utilizes on-going system performance improvement data to make budgetary decisions.

Financial data are routinely derived from the EMSIS, insurers, emergency department, hospital discharge, death certificate and rehabilitation data and, along with data on general EMSS infrastructure costs, are used to assess cost/benefit of the system. A method exists to investigate, diagnose and intervene in problems identified.

B. Policy Development

The legislature has identified and appropriated infrastructure funding from general fund and non-lapsing sources for the lead agency which is consistent with its legislated responsibilities.

C. Assurance

The annual reporting cited in model section 1.C includes system financial reporting.

3. Resource Management Subsystems - Human Resources

Overview

Organized processes exist for work force assessment, recruitment, retention, education as needed, and for identification and deployment of emergency medical care providers within the state for routine and large scale event operations.

Components

A. Assessment

A performance standard has been established for the turnover rate of prehospital licensed/certified personnel. The NHTSA Performance Measures (PM) Indicator “2-Annual Turnover Rate” or a similar measure has been adopted as a statewide PM indicator and data contributing to it are routinely collected, results analyzed and interventions sought where necessary on a local, regional, and state level.

B. Policy Development

Written evidence exists that EMS education opportunities are routinely impacted by regular reviews of EMS system performance.

The EMSS lead agency has adopted scopes of practice consistent with the National EMS Scope of Practice and these have been implemented with accompanying guidance and requirements.

The EMSS lead agency requires national certification for state licensure/certification of all levels of EMS personnel. “National certification” implies a testing process similar to that of the current National Registry of EMTs.

The EMSS lead agency requires national accreditation of paramedic education programs. It has an internal mechanism for approving other levels of education programs or courses until such time as national accreditation is available at one or more of these levels. This internal mechanism includes standards that are consistent with the National EMS Education Standards. The lead agency has committed to requiring national accreditation within two years of accreditation availability. “National accreditation” implies a qualifying process similar to that of the current Commission on the Accreditation of EMS Programs (CoAEMSP).

C. Assurance

The EMS lead agency maintains clear procedures for enforcing personnel compliance with laws, regulations, and policies pertaining to provider licensure/certification. These include processes for adequate review and due process in enforcement.

The EMSS lead agency assures an on-going needs assessment for areas of personnel shortage, trends in statewide personnel utilization, and for health/safety issues specific to the EMS working environment. Based on this on-going needs assessment, the lead

agency has either documented actions to address human resources needs in the state or has documented that no significant workforce needs or provider agency management issues exist.

A structured mechanism exists to educate personnel in new protocols and treatment approaches, as adopted by medical direction, in a timely manner. There is a method to monitor compliance with new procedures as they are instituted.

4. Resource Management Subsystems – Transportation

Overview

A mechanism exists to identify and assure adequate deployment of ground, air, and water response and transportation resources. These resources must meet specific standards of quality, to assure timely and appropriate response scaled to the nature of an event. There is an ability to monitor safety and response time issues.

Components

A. Assessment

A performance standard has been established for response, scene, and transport time intervals by both mean and 90th percentile measures. The NHTSA Performance Measures (PM) Indicators “**10.1-** Mean Emergency Patient Response Interval”, “**10.2-** 90th Percentile Emergency Response Interval”, “**10.3-** Mean Emergency Scene Interval”, “**10.4-** 90th Percentile Emergency Scene Interval” “**10.5-** Mean Emergency Transport Interval”, and “**10.6-** 90th Percentile Emergency Transport Interval”, or similar measures, have been adopted as statewide PM indicators and data contributing to them are routinely collected, results analyzed and interventions sought where necessary on a local, regional, and state level. Statewide performance meets or exceeds the performance standard as a whole.

B. Policy Development

The lead EMSS agency has established standards, drawing upon national or otherwise evidence-based standards where possible, for the equipping and operation of ground and water ambulances and other EMS vehicles, and for the clinical operations of air medical services. Performance standards have been established as policy for the indicators in section 4.A. There is a policy to inspect vehicles and/or review performance measures on a regular basis.

C. Assurance

The lead EMSS agency conducts on-going performance improvement and/or regularly inspects vehicles utilizing the standards and performance indicators it has established. The agency has enforcement authority, including well-defined due process procedures, to take timely and effective action when inadequacies are discovered that may pose a hazard to patients or the public.

The EMSS lead agency is responsible for and has the authority to lead EMSS operations in statewide disaster planning and in mass casualty events that exceed local EMS agency and hospital mutual aid capabilities. It is empowered to provide (directly or through contract) EMS coordinating, patient care, and transportation services in areas where usual and customary EMS services have been withdrawn, or otherwise do not exist, and have been determined to be necessary.

5. Resource Management Subsystems – Facility and Specialty Care Regionalization

Overview

Regional, accountable subsystems of emergency medical care are effectively integrated into the statewide EMSS and formally designated by the lead agency. These subsystems are organized to identify, treat and route critically ill or injured patients who would benefit from immediate trauma, cardiac, pediatric, burn or other types of specialty care. The EMSS lead agency must be authorized and adequately funded to supervise the activities of these statewide, contiguous regionalized, accountable systems of care.

Components

A. Assessment

A performance standard has been established for “Major Trauma Triage to Trauma Center Rate”. The NHTSA Performance Measures (PM) Indicator “5- Major Trauma Triage to Trauma Center Rate” or a similar measure has been adopted as a statewide PM indicator and data contributing to it are routinely collected, results analyzed and interventions sought where necessary on a local, regional, and state level. Statewide performance meets or exceeds the performance standard as a whole.

A performance standard has been established for “STEMI Triage to Specialty Center Rate”. The NHTSA Performance Measures (PM) Indicator “9- STEMI Triage to Specialty Center Rate” or a similar measure has been adopted as a statewide PM indicator and data contributing to it are routinely collected, results analyzed and interventions sought where necessary on a local, regional, and state level. Statewide performance meets or exceeds the performance standard as a whole.

B. Policy Development

The lead agency has two or more on-going committees with broad stakeholder representation meeting regularly to develop and implement specialty care subsystems (e.g. trauma, cardiac, stroke, pediatric, burns). These are formally organized as multidisciplinary, multi-agency subcommittees of the state EMSS body. Their plans are integrated effectively into the statewide EMSS plan and its on-going review and improvement. Subsystem components coordinate well through the lead agency and its representative body (e.g. medical direction subsystem development of prehospital protocols draws upon representatives of specialty care subsystems for protocols in those areas).

There is a legislatively authorized process for the designation of specialty care facilities that is governed by the EMSS lead agency and its specialty care subsystem committees. The lead agency is actively designating and monitoring specialty care facilities as components of at least two subsystems (e.g. trauma, cardiac, pediatric, burn).

A standard definition of transfer “qualifying patient” and statewide processes to implement transfers based on it are in place for two or more specialty care subsystems. These are linked to performance improvement and medical direction review subsystems, and updated as needed on a statewide basis.

State EMSS-wide prehospital triage criteria are in place for two or more specialty care subsystems (e.g. the ACS/COT Trauma Field Triage Criteria for any trauma system). These are linked to performance improvement and medical direction review for appropriateness in identifying qualifying patients and in ensuring that they are transported to the appropriate specialty care facility. Sensitivity and specificity (over- and under-triage rates) of the criteria used are regularly reported through the EMSS lead authority. Updates to the triage criteria are made as necessary to improve system performance.

Specialty care center designation processes in two or more specialty care subsystems are mature. “Natural” regions, based on the geographic organization of those facilities and patient flow around them, have become apparent. The EMSS lead agency has developed a participatory, representative process for the designation of regional, accountable systems of care, including the ability to negotiate regional boundaries as necessary, and has designated these. It has included emergency management, emergency health preparedness, and public safety partners in these discussions in order to coordinate regional response organization. Where necessary, the EMSS lead agency has established processes and administrative infrastructure, to support planning, implementation and coordination of regional system development.

The emergency medical services for children (EMSC) specialty care subsystem is mature as reflected by the existence of an EMSC specialty care subsystem committee of the lead agency, a legislatively authorized facility recognition system for pediatrics, a formal definition of “qualifying pediatric patient” for the purpose of transfer to a facility more highly recognized for pediatric care, and prehospital triage criteria for pediatrics.

C. Assurance

Facilities are represented in the regional, accountable systems of care performance improvement processes and benchmark their performance against local and national standards. Issues of noncompliance are monitored and addressed as part of the regional performance improvement process. De-designation is reserved only as a final public health safeguard and is delegated to the regions by the lead agency.

There is authority, budget, and job description for a full-time EMSS medical director and one is in place. The job description includes requisite education, experience and certification for this position.

There is evidence to show a well-integrated program of rehabilitation is available for all EMSS patients. Rehabilitation programs are included in the EMSS plan, and specialty care centers work closely with rehabilitation centers and services to ensure quality outcomes for EMSS patients.

6. Public Access and Communications Subsystems

Overview

A subsystem exists to organize wire-line, cellular, voice over internet protocol, automatic crash notification, patient alerting system device and other public 9-1-1 access to the Emergency Medical Services System. The EMSS utilizes all voice, video, telemetry, and other data communications as necessary to best enhance real-time information management for patient care. Medically directed systems of emergency medical dispatch (EMD) and communications are in place to adequately support the statewide regionalized, accountable systems of care.

Components

A. Assessment

There is a regularly updated statewide index of EMS agencies, emergency medical dispatch centers, and hospitals listing (as appropriate) their emergency access type (9-1-1, E-9-1-1, other), direct ten-digit dispatch number, ten-digit business number, dispatch voice frequency, dispatch data frequency, field to hospital frequency/ies, hospital to hospital frequency/ies, EMS tactical frequency/ies, broadband or wideband frequency/ies and purpose. The index also lists major communications system assets (at least fixed radio consoles and mobile units, towers, base stations, and recording equipment) by date and type.

B. Policy Development

A statewide interoperability executive committee (SIEC)³ or similarly named and functioning body with EMSS representation produces and disseminates a public safety statewide communications interoperability plan (SCIP)⁴ integrating the EMSS communications system plan. In addition, a “system users guide” is produced which explains NIMS and SafeCom compliant policies and procedures for participation in the public safety communications interoperable system (e.g. use of interoperability channels in major events and plain language usage at all times).

There is an authorized, adequately funded SIEC within the executive branch to plan, coordinate, implement, manage, and enforce policies for interoperable communications including instate frequency coordination. The EMSS is actively represented on the SIEC.

C. Assurance

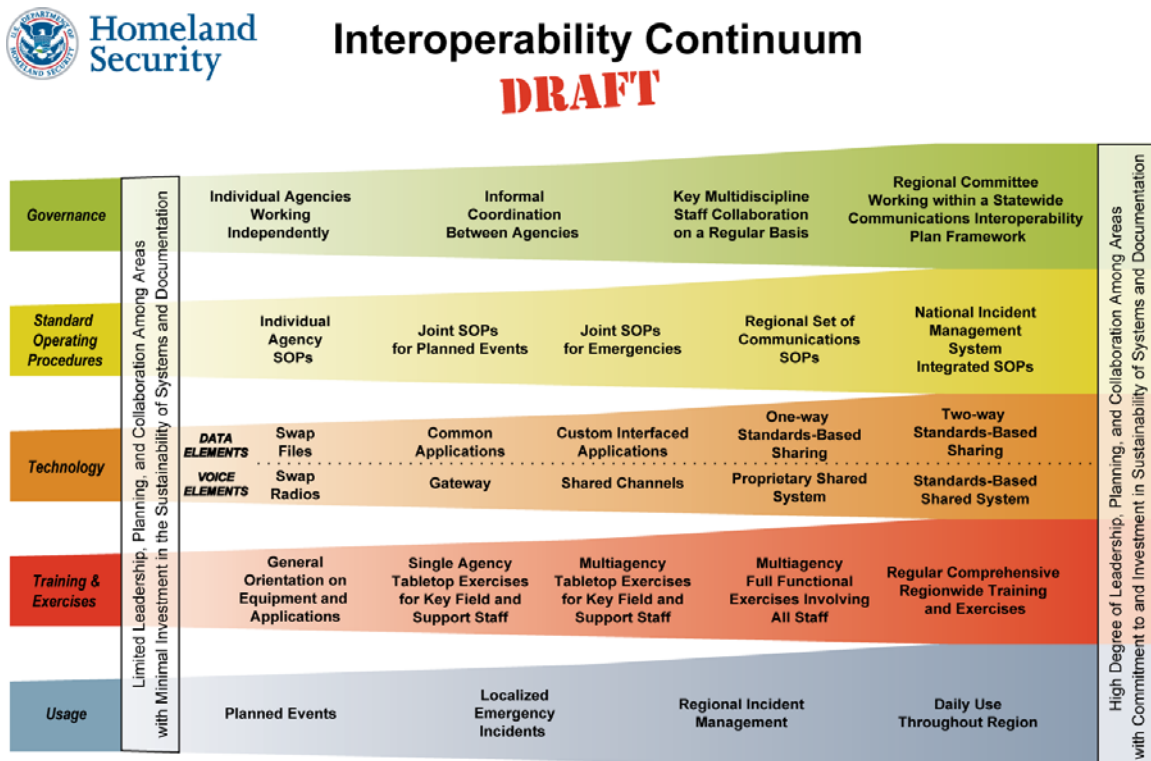
EMD protocols have been developed with statewide coordination and with EMSS medical direction oversight. It is recognized that EMD protocols for resource dispatch must be specific to the resources present in any given locale and decisions on these protocols must reflect input of those locales. There are established procedures to involve representatives of EMD staff in EMD and EMSS performance improvement and a “feedback loop” to change protocols or to update dispatcher education when appropriate. These protocols include, but are not limited to, which resources to dispatch (for example, Advanced Life Support (ALS) versus Basic Life Support (BLS), use of lights and sirens

mode, early notification of the air medical and specialty facility resources, pre-arrival instructions, and other procedures necessary to ensure resources dispatched are consistent with the needs of emergency patients.

All emergency callers to PSAPs are assured of interaction with EMD certified staff in a facility whose EMD program has a medical director and has been reviewed and approved/certified by the EMSS lead agency.

State-of-the-art electronic, seamlessly linked citizen access (9-1-1) and dispatch communication systems are available within all jurisdictions and utilize state-of-art EMD and other dispatch procedures routinely evaluated in an on-going performance improvement program.

State-of-the-art electronic communication systems are available within all jurisdictions and are coordinated by an SIEC or similar body. The systems constitute a linkable statewide system that is effective in all-hazards responses, can be used as a quick call system for resources and is linked to public health and other nontraditional partners. The system is routinely evaluated on a statewide basis and affords narrowband, wideband and broadband solutions to EMS agencies and facilities in all jurisdictions. All jurisdictions are at least at mid-point, and most are at the far right on the Interoperability Continuum (below). The maturity of statewide EMSS communications interoperability is as a whole at the far right as defined by the USDHS SafeCom Interoperability Continuum.



7. Public Information, Education and Prevention Subsystem

Overview

A subsystem exists which is organized to monitor and identify the public's health care needs that can be addressed by the Emergency Medical Services System (as integrated with the primary care and other systems of care). Specific public information and education components should include the public's familiarity with the Emergency Medical Services System and appropriate access to that system, self-help and bystander care.

Components

A. Assessment

There is a written descriptive, graphic, and tabular comparison of the *top ten* leading causes of emergent illness and injury death using local, regional, statewide, and national data. An attempt is made to compare data to EMS system improvement efforts.

The public health epidemiologist, along with EMSS leaders, is involved in the development of emergent illness/injury reports. There is clear evidence of data sharing, data linkage, and well-defined reporting roles and responsibilities.

The EMSS conducts a scientific consumer poll on a periodic basis to gauge expectations about the EMSS such as access, speed of response, and level and type of care expected. Results are utilized to focus certain public information and education activities and system service development.

B. Policy Development

A well-orchestrated and continuing EMSS media campaign is evident. There is clear evidence that key policy makers at the state, regional, and local levels are keenly aware of the benefits of the EMSS and of the importance of emergent illness/injury prevention programs.

C. Assurance

The EMSS lead agency has developed a formal technical assistance package for communities which includes a detailed explanation of community EMS system evaluation methods and informed self-determination processes⁵. It has developed or adapted its own informed self-determination program (generically, a process through which communities are encouraged to evaluate their local EMSS, learn about alternative levels and type of EMS response and their comparative costs and then determine the type of system and level of public cost they prefer), and provides a range of staff support, guidance materials and subsidies to encourage adoption of the program.

The EMSS lead agency routinely distributes PIER support materials to provider agencies, publicizes this availability, and provides staff technical assistance as requested. This program includes not only robust resources on raising the profile of the local EMSS and

emergency illness/injury prevention efforts in the community, but enables agency leaders to explore opportunities to become involved in directly meeting preventive health, primary care and other needs in the community in order to strengthen the clinical base and response capabilities of the agency. This effort encourages consideration of EMS based community health services (“community paramedicine”)⁶, or other programs appropriate to the health needs of the state’s various community types, and offers technical assistance in approaching issues such as medical direction and training for such services.

8. Clinical Care, Integration of Care, and Medical Direction Subsystem

Overview

This subsystem identifies and guides the organized relationships among local, regional, and state providers of medical direction, their mechanisms and authority for clinical oversight and the establishment of medical and operational protocols, for the clinical services of EMSS providers and their integration within other community systems of care.

Components

A. Assessment

The NHTSA Performance Measures (PM) Attributes “17.1- Call Complaint Distribution” and “17.2 – Call Complaint Rate” have been adopted as statewide PM attributes and data contributing to them are routinely collected, results analyzed at all levels and system planning interventions sought where necessary on a local, regional, and state level (e.g. better matching resources to call types experienced).

A performance standard has been established for prehospital relief of pain. The NHTSA Performance Measures (PM) Indicators “6.1- Pain Relief Rate”, “6.2- Pain Worsened Rate”, and “6.3- Pain Unchanged Rate” have been adopted as statewide PM indicators and data contributing to them are routinely collected, results analyzed and interventions sought where necessary on a local, regional, and state level. Statewide performance meets or exceeds the performance standard as a whole.

A performance standard has been established for “EMS Cardiac Arrest Survival Rate to Hospital Discharge”. The NHTSA Performance Measures (PM) Indicator “18.2- EMS Cardiac Arrest Survival Rate to Hospital Discharge” has been adopted as a statewide PM indicator and data contributing to it are routinely collected, results analyzed and interventions sought where necessary on a local, regional, and state level. Statewide performance meets or exceeds the performance standard as a whole.

A performance standard has been established for at least one additional indicator of system interest in expanding its role to meet the changing needs of the patient population. This measure might involve the rate of red light and siren use (indicating changing response practice and/or call urgency), the rate of non-transports by patient complaint (indicating greater frequency of non-emergency care) or some other indicator of the EMS system adapting to meet other patient needs. Data contributing to it are routinely collected, results analyzed and interventions sought where necessary on a local, regional, and state level. Statewide performance meets or exceeds the performance standard as a whole.

B. Policy Development

There is a clear-cut organization and division of legal authority and responsibility for medical direction and for information flow involved in the processes of protocol adoption, performance improvement, and restricting the practice of prehospital care providers. As dictated by the size and complexity of the statewide, regional and local systems there are medical committees at appropriate levels to encourage and facilitate the flow of information and input to fuel these processes and to serve as deliberative bodies in these processes. Ultimate authority and responsibility for medical direction is specified in statute and extends from the state medical director through the statewide medical committee to regional medical directors to regional medical committees to local medical directors and providers as appropriate.

There is clearly defined legal authority and responsibility for the EMSS medical direction subsystem including the authority and responsibility to adopt protocols, to implement a performance improvement system, to restrict the practice of prehospital care providers, and to generally ensure medical appropriateness of the EMS system. There is a paid statewide EMSS medical director from whom this statutory authority and responsibility extends, and with it limitations on liability, to regional and, where applicable, local medical directors. The system for creating protocols lies at the state level but is the responsibility of the state and regional medical directors as a group with input from local medical directors, other physicians and EMS providers and with opportunities for local variation approved by the lead agency.

C. Assurance

The EMSS lead agency enforces, utilizing well-defined standards, policies, procedures, and authority, all prehospital clinical practice. It employs a documented, effective system of performance improvement which has specific points of integration with and separation from disciplinary and other licensure/certification actions and is coordinated well with the statewide medical direction system. In all enforcement practices, the lead agency has well-defined procedures for adequate review and due process.

The EMSS lead agency requires EMSS medical directors to be credentialed. The EMSS lead agency credential requires a specific initial training program and on-going continuing education.

9. Information, Evaluation, and Research Subsystem

Overview

This subsystem assures the collection of accurate data on EMSS activity, including a NEMSIS compliant and integrated patient care/call reporting (PCR) subsystem with 100% provider participation, a regionalized subsystem of performance improvement, and a mechanism to encourage research to improve patient care and EMSS operations.

Components

A. Assessment

Death certificate data, by E-code, are used as part of the overall assessment of EMSS care, including statewide rural and urban preventable mortality studies.

All EMSS data stakeholders (including insurance carriers, FARS, and rehabilitation, in addition to typical EMS system resources) have been identified, data access agreements executed, hardware and software resources secured, and the staff allocated to deterministically and probabilistically link, analyze, and report a variety of data sources in a timely manner and this occurs routinely.

There is a comprehensive written policy and demonstrated compliance concerning data management and governance including an evaluation of the quality, timeliness, and completeness of data, with confidential protection of records ensured while allowing appropriate access for research purposes.

B. Policy Development

The EMSS lead agency routinely utilizes NHTSA Performance Measures (PM) and their own created indicators (including outcome measures) and attributes to gauge the effectiveness of the EMSS at all levels and against state and national results. The lead agency provides these to the public with appropriate explanation and system improvement suggestions.

A well-integrated emergent illness/injury reporting system exists. Evidence is available to demonstrate how system providers routinely use EMS information system (EMSIS) data to identify program needs, to develop strategies on program priorities, and to set annual goals for emergent illness/injury prevention.

The statewide multidisciplinary, multi-agency EMSS (advisory or authority) body formally delegates by rule to a statewide medical direction committee, or other similar body, the responsibility to complete regular reviews of annotated EMSIS data reports to determine and recommend the need for system modifications. This committee meets regularly with stakeholders and reviews EMSIS data reports to assess system performance over time, looking for ways to improve system effectiveness and patient outcomes.

General statewide, regional, and jurisdictional/local agency EMSIS data reports are generated by the EMSS (or by regional/jurisdictional bodies as appropriate) no less than once per year and are made available to EMSS leaders on all levels and to other stakeholders and the public as appropriate to evaluate and improve system performance.

There is a legislative mandate that an EMSIS is implemented and maintained by the lead agency, and that all EMSS provider agencies provide data electronically on a regular, timely basis. EMSS hospitals and other facilities facilitate real-time data linkage and transmission for operational and clinical purposes (e.g. field access to patient history; on-line medical direction access to field data on patients and resources) and outcome evaluation. The EMSIS is NEMSIS-compliant and sends data to NEMSIS.

There is a statewide performance improvement (PI) plan implemented and mandatory at the state, regional, jurisdictional, and local agency level with dedicated, specified medical oversight.

EMSS lead agency policies for educational programs require that familiarity with the scientific literature, appropriate research principles, and the value of initiating and participating in research to produce evidence-based advancement of the field are included in EMS education content.

C. Assurance

The state EMS lead agency enforces provider agency participation in the EMSIS and statewide performance improvement (PI) system, as well as facility participation in EMSIS for operational, clinical, and outcome evaluation purposes.

10. Large Scale Event Preparedness and Response Subsystem

Overview

A NIMS compliant subsystem exists to enable the scaling up of day-to-day operations to meet the needs of larger, all-hazards events. Threat and capabilities assessments have identified the likeliest events to occur in the state and the capabilities required and available to address them. It is essential that mass casualty responses involve logical expansion and extension of daily practices and not the establishment of new practices reserved for large scale events. Equipment, human and other resources are described in a manner compliant with NIMS resource typing definitions.

Components

A. Assessment

There is a resource assessment of the EMSS' ability to expand its capacity to respond to mass casualty incidents (MCIs) in an all-hazards approach. The written inventory of trauma system-wide MCI capacity has been shared with, and incorporated into, broader statewide planning efforts for all-hazards responses.

The EMSS has completed a gap analysis based on the resource assessment for EMSS emergency preparedness and on system resource standards adopted.

B. Policy Development

The EMSS plan has established clearly defined methods of integrating with other emergency preparedness plans (all-hazards). The EMSS plan addresses the lead agency coordination among EMS, public health, public safety and emergency management. Plans are well integrated and include annual multidisciplinary exercises to test this capability using scenarios based on risk vulnerability assessment and Homeland Security Exercise and Evaluation Program (HSEEP) guidelines. Results from drills and live responses are used to further improve the plans and processes. The plan describes means to allow EMS resources to be used across jurisdictions, both intrastate and interstate, using the Emergency Management Assistance Compact and NIMS.

The EMSS plan includes identification of additional resources (both manpower and equipment) necessary to respond to a mass casualty. EMS leaders coordinate with emergency management officials to accomplish this. The plan utilizes NIMS compliant resource typing definitions to describe these. There is a well-drafted and rehearsed EMSS plan, along with sufficient caches of equipment and backup personnel, that ensures the rapid deployment of additional resources during mass casualty incidents. The plan has specific provisions for a pandemic influenza event.

C. Assurance

The EMSS, through the lead agency, has access to additional equipment, materials, and personnel for large-scale events. The lead agency has acquired additional equipment and materials for both the prehospital and hospital response to all-hazards events.

A deployment mechanism to share personnel resources has been developed and tested in both the prehospital and hospital settings (e.g., mutual aid, precredentialing of practitioners, and rapid assignment of privileges). The system routinely tests its capabilities in this area.

There has been an assessment of need for protective resources (including vaccinations, prophylaxis, and personal protective equipment) for prehospital providers and their families. All of the resources identified as being needed have been made available. There is a system for routinely reassessing need for protective resources and for identifying new providers as they enter the EMSS.

B. The Emergency Medical Services System Self-Assessment Tool

The model employed for the Self-Assessment Tool and the Emergency Medical Services System itself is a refinement of the model developed in 2006 by the federal Trauma Program (USDHHS). The Model Trauma System Planning and Evaluation (MTSPE) document employed a Benchmark/Indicator/Scoring (BIS) approach to assessment and completely replaced the categorical subsystem approach of the federal 1992 Model Trauma Plan template with a public health model. The categorical subsystem or attribute approach has been endemic to EMS since the 1973 federal EMS Systems Act established a 15 component approach to system planning and implementation.

The National Highway Traffic Safety Administration (NHTSA) Technical Assistance Team process has been virtually universally employed to assess and reassess statewide EMS systems for over fifteen years. It takes a system categorical approach with some 70 indicators employed. The *EMS Agenda for the Future*, a visionary 1996 map for the future of EMS system development has been widely embraced for planning purposes. It, too, uses a categorical approach with just over 80 indicators. Citing the historical and widespread use of this approach to EMS planning is not intended as a reason for rejecting the public health or any other model in Emergency Medical Services System planning. It is a significant factor, however, in the potential success of introducing new models.

Recognizing the merit of the public health model core function processes and the rationale of the MTSPE developers, and also recognizing the benefit of retaining enough of a categorical system component approach to be recognizable to EMS planners, the Emergency Medical Services System Self-Assessment and model plan incorporate a hybrid described in Table 2 on the following page.

Table 2		Structure: Emergency Medical Services System Categorical Components								
Process: Core Functions	System Leadership, Organization, Regulation & Policy Subsystem	Resource Management Subsystems				Public Access & Communications Subsystem	Public Information, Education & Prevention Subsystem	Clinical Care, Integration of Care, & Medical Direction, Subsystem	Information, Evaluation, & Research Subsystems	Large Scale Emergency Preparedness & Response Subsystem
		Financial	Human	Transportation	Facility & Specialty Care Regionalization					
	Assessment Process									
	1. Monitor									
	2. Diagnose/ Investigate									
	Policy Process									
	1. Inform & Organize									
	2. Develop Policies									
	Assurance Process									
	1. Enforce Policies									
	2. Provide Services									
	3. Evaluate									

The “Emergency Medical Services System Categorical Components” are a result of revisiting the component structures employed by the NHTSA Technical Assistance Team program and the *EMS Agenda for the Future* and achieving an updated blend (e.g. the addition of the post 9/11 consideration of a subsystem for large scale events).

The “Core Functions” derive from the public health model and its three core functions and ten essential services. The definitions and inclusion of these have been remodeled somewhat to address the issue of “square pegs and round holes” in trying to shoehorn some EMS concepts into the current public health definitions. These new definitions include:

1. **Assessment Process** - The regular and systematic collection and analysis of data (monitoring) from a variety of sources to diagnose the status and cause of a problem and to identify potential opportunities for interventions.
2. **Policy Process** - Using the results of the assessment process in an organized manner to inform and organize stakeholders to develop policies intended to achieve specific goals to improve the public’s health.
3. **Assurance Process** – The enforcement of policies (administrative dictates, regulations and laws), provision of direct services, and evaluation of the effectiveness of that enforcement and those services to achieve specific goals to improve the public’s health.

Even retooled, there are not indicators for every essential service under all the core functions. Indicators were prioritized to produce a clear system-wide assessment using a manageable number of indicators (75).

1. System Leadership, Organization, Regulation & Policy Subsystem

a. Assessment Process

i. Monitor

Indicator 1.a.i.1	Scoring
Regional, accountable systems of care are established and monitored.	0. Not known.
	1. There is no formal substate structure of care other than local EMS jurisdictions.
	2. Individual trauma, cardiac or other specialty subsystems have evolved but are not formally recognized in EMSS statute, rules, regulations, protocols or other policies.
	3. Individual trauma, cardiac or other specialty subsystems have evolved and have some functional meaning in EMSS statute, rules, regulations, protocols or other policies. Some systems of accountability have been developed within regions.
	4. There are clearly defined specialty subsystems of care with regional infrastructures established uniformly under the state EMSS lead agency by statute, rules, regulations, protocols or other policies to guide and monitor care.
	5. There are clearly defined specialty subsystems of care with regional infrastructures established uniformly under the state EMSS lead agency by statute, rules, regulations, protocols or other policies to guide and monitor care. These regional systems of care routinely and uniformly report on care performance through the state EMSS lead agency, which routinely monitors these regional, accountable systems of care.

ii. Diagnose/Investigate

Indicator 1.a.ii.1	Scoring
Strategic planning process exists to develop or update the state EMSS plan supported by external review and/or QI process.	0. Not known.
	1. No external examination of the EMSS or individual components has occurred.
	2. An internal or external examination of the EMSS is scheduled within the next 6 months.
	3. An internal review has been conducted by the EMSS lead agency utilizing the Model EMS System Self-Assessment and a strategic planning process has been employed to develop or update the state EMSS plan.
	4. A formal evaluation has been conducted by outside EMSS “experts”, at a minimum utilizing the Model EMS System Self-Assessment indicators and format, and a strategic planning process has been employed to develop or update the state EMSS plan. .
	5. Independent external reassessment occurs regularly, at least every five years, and/or a broad-based statewide quality improvement process is employed on an on-going fashion. Either employs the Model EMSS Self-Assessment as a basis, and is linked with a strategic planning process to update the EMSS plan.

b. Policy Process
i. Inform & Organize

Indicator 1.b.i.1	Scoring
The lead agency demonstrates that it can bring organizations together to implement and maintain an EMSS which integrates the needs of special populations.	0. Not known.
	1. There is no evidence of partnerships, alliances, or organizations working together to implement and maintain a comprehensive EMSS.
	2. There have been limited attempts to organize groups, but to date no ongoing system committees meeting regularly to design or implement the EMSS.
	3. The lead agency has multiple committees meeting regularly to develop and implement a comprehensive EMSS plan.
	4. The lead agency demonstrates, through its various committees, an ability to bring together multidisciplinary groups interested in developing, implementing, and maintaining a comprehensive EMSS plan which addresses the needs of children and other special populations. Multiple stakeholders for various disciplines are routinely recruited to participate in system operational issues and refinement depending on expertise needed.
	5. The lead agency has brought together multiple stakeholder groups and other state agencies to assist with, and make recommendations on, the development and implementation of the EMSS, preferably through a statewide, statutorily authorized, multidisciplinary, multi-agency body acting in an advisory or authority capacity. There is evidence that the needs of pediatric and other special populations have been integrated into state statutes, rules, and regulations, and are represented on this body.

ii. Develop Policies

Indicator 1.b.ii.1	Scoring
Legislative authority (state regulations, rules and/or statute) identifies an EMSS lead agency, director, and medical director, and authorizes system development and oversight responsibilities.	0. Not known.
	1. There is no specific legislative authority to plan, develop, implement, manage, and evaluate, or fund, the EMSS and its component parts.
	2. There is legislative authority for establishing an EMSS, and specific timelines for adoption are being drafted and reviewed by emergency care constituencies.
	3. The lead agency is identified in State statute and is authorized to plan, develop, lead, and regulate a comprehensive statewide EMSS system including the component subsystems described in the Model EMSS Plan.

	4. The lead agency is identified in State statute and is authorized to plan, develop, lead, and regulate a comprehensive statewide EMSS system including the component subsystems described in the Model EMSS Plan., and is required to report on the progress and effectiveness of system implementation.
	5. The lead agency, state EMS director, and state EMS medical director are identified in State statute. The lead agency is authorized to plan, develop, lead, monitor and regulate a comprehensive statewide EMSS system. This system is specified as including a statewide organization of regionalized, coordinated and accountable systems of emergency care with the component subsystems described in the model EMSS. The lead agency is required to regularly report on the progress and effectiveness of system implementation based on a quality improvement process.

Indicator 1.b.ii.2	Scoring
Administrative rules/regulations direct the development of operational policies and procedures at the State, regional, and local levels.	0. Not known.
	1. There is no legal authority to adopt administrative rules/regulations regarding the development of the EMSS at the State, regional, or local levels.
	2. There is legal authority, but there are no administrative rules/regulations governing EMSS development, including component subsystems of the EMSS.
	3. There are draft State, regional, or local rules/regulations for the different subsystem components of EMSS development.
	4. There are existing statewide administrative rules/regulations for planning, developing, and implementing the EMSS and its subsystem components at the State, regional, and local levels.
	5. The lead agency regularly reviews, through established committees and stakeholders, the rules/regulations governing system performance, including policies and procedures for system operations at the State, regional, and local levels.

Indicator 1.b.ii.3	Scoring
The lead agency has adopted clearly defined EMSS standards (e.g., facility standards, triage and transfer guidelines, data collection standards) and has sufficient legal authority to ensure and enforce compliance.	0. Not known.
	1. The lead agency does not have sufficient legal authority and has not adopted or defined EMSS performance and operating standards, nor is there sufficient legal authority to do so.
	2. Sufficient authority exists to define and adopt standards for EMSS performance and operations, but the lead agency has not

	yet completed this process.
	3. There is sufficient legal authority to adopt and implement operation and performance standards including enforcement. Draft process procedures have been developed.
	4. The authority exists to fully develop all operational guidelines and standards; the stakeholders are reviewing draft policies and procedures; and adoption by the lead agency, including implementation and enforcement, is pending.
	5. The lead agency has adopted clearly defined EMSS standards (e.g., facility standards, triage and transfer guidelines, data collection standards) and has sufficient legal authority to ensure and enforce compliance. These EMSS performance standards are in place and compliance is being actively monitored and enforced through well-defined policies and procedures.

Indicator 1.b.ii.4	Scoring
The lead agency has adopted and uses goals and time-specific, quantifiable, and measurable objectives for the EMSS.	0. Not known.
	1. There are no goals or time-specific, quantifiable, and measurable objectives for the EMSS.
	2. The lead agency leaders have met to discuss time-specific, quantifiable goals.
	3. The lead agency leaders are beginning the process of identifying measurable program goals and outcome-based, time-specific, quantifiable, and measurable objectives.
	4. The lead agency leaders have adopted goals and time-specific, quantifiable, and measurable objectives that guide system performance.
	5. Lead agency leaders, in consultation with their statewide multidisciplinary, multi-agency board, have established measurable program goals and outcome-based, time-specific, quantifiable, and measurable objectives that guide system effectiveness and system performance.

Indicator 1.b.ii.5	Scoring
The lead agency has adopted an Emergency Medical Services System plan.	0. Not known.
	1. There is no EMSS plan, and one is not in progress.
	2. There is no EMSS plan, although some groups have begun meeting to discuss its development.
	3. An EMSS plan was developed and adopted by the lead agency. The plan, however, has not been endorsed by EMSS stakeholders.
	4. An EMSS plan has been developed with multi-agency groups, adopted, and endorsed by those groups.
	5. A comprehensive EMSS plan has been developed and adopted in conjunction with all key EMSS stakeholders, and includes the integration of all subsystem

	components (and the Transportation Resources component specifically defines EMS service areas and their integration in regional, accountable systems of care). This plan is linked to the Strategic Highway Safety Plan to ensure that EMSS information is used to evaluate highway safety problems and to improve post crash care and survivability.
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c. Assurance Process

i. Enforce Policies

Indicator 1.c.i.1	Scoring
The lead agency ensures that prehospital care is provided by licensed agencies.	0. Not known.
	1. There is no evidence that the state ensures appropriate agency licensure and compliance.
	2. The EMSS lead agency refers complaints concerning issues of prehospital agency performance to another agency charged with prehospital EMS regulation.
	3. The EMSS lead agency resolves complaints involving prehospital agencies.
	4. The EMSS lead agency monitors compliance of prehospital agencies with rules, regulations, and protocols.
	5. The EMSS lead agency maintains ongoing EMSS performance improvement processes and enforces prehospital agency compliance with any rules, regulations, or protocols (e.g., taking patients to the correct facility in accordance with pre-existing destination protocols).

Indicator 1.c.i.2	Scoring
The lead agency ensures that prehospital care is provided by licensed personnel.	0. Not known.
	1. There is no evidence that the state ensures appropriate agency licensure and compliance.
	2. The EMSS lead agency refers complaints concerning issues of prehospital personnel performance to another agency charged with prehospital EMS regulation.
	3. The EMSS lead agency resolves complaints involving prehospital personnel.
	4. The EMSS lead agency monitors compliance of prehospital personnel with rules, regulations, and protocols.
	5. The EMSS lead agency maintains ongoing EMSS performance improvement processes and enforces prehospital personnel compliance with any rules, regulations, or protocols (e.g., taking patients to the correct facility in accordance with pre-existing destination protocols).

ii. Provide Services

Indicator 1.c.ii.1	Scoring
The lead agency provides an array of system services to EMSS agencies, facilities, and others based on identified needs.	0. Not known.
	1. No process for assessing the needs of EMSS participants or others has been conducted or is planned.
	2. An internal or external examination of the EMSS including, leading to, or for the sole purpose of a needs assessment is scheduled within the next 6 months.
	3. An internal or external examination of the EMSS including, leading to, or for the sole purpose of a needs assessment has been performed. An array of service needs has been identified and plans to develop or update those services are being pursued.
	4. An internal or external examination of the EMSS including, leading to, or for the sole purpose of a needs assessment is regularly performed. An array of service needs including leadership, planning, coordination, implementation, response and technical assistance services are evaluated.
	5. The EMSS lead agency provides an array of services addressing system needs such as leadership, planning, coordination, implementation, response and technical assistance. It performs an internal or external examination of the EMSS including an assessment of needs for such services at least every five years. Such an assessment may be replaced by a system of performance improvement which generates data sufficient to evaluate needs and update services on an on-going basis.

iii. Evaluate

Indicator 1.c.iii.1	Scoring
The lead agency prepares annual reports on the status of the statewide EMSS.	0. Not known.
	1. No annual reports are available.
	2. Annual reports are prepared but are not based on input from providers and other key stakeholders.
	3. Annual reports are written by the lead agency with input from providers and other key stakeholders. Many subsystem reports are produced without reference to one another.
	4. Comprehensive annual reports on the status of the statewide EMSS, including the effectiveness of all subsystems are written by the lead agency in conjunction with providers and other stakeholders. These have begun to incorporate state EMSIS data and performance measures derived from this self-assessment tool.
	5. Comprehensive annual reports on the status of the statewide EMSS, including the effectiveness of all subsystems, are written by the lead agency in conjunction with providers and other stakeholders. These routinely report state EMSIS data and performance measures derived from this self-assessment tool and integrate

	comparisons with similar states through NEMSIS data.
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2. Resource Management Subsystems – Financial

a. Assessment Process

i. Monitor

Indicator 2.a.i.1	Scoring
Budgets are developed for the lead agency and other EMSS subsystem infrastructure.	0. Not known
	1. There is no funding to support the EMSS lead agency infrastructure and/or there are no processes in place upon which to base budgets.
	2. The only budgeting process is that of the lead agency's executive branch department. There may be some ad hoc interested party input sought in that process. There may be separate legislative initiatives for specific EMSS needs by outside special interests.
	3. The lead agency utilizes a participative process representative of EMSS stakeholders to develop its budget.
	4. The lead agency incorporates the results of a regular state EMSS evaluation, needs assessment or a strategic planning process in a participative, representative process to develop its budget.
	5. The lead agency routinely utilizes strategic planning processes, with broad-based stakeholder representation and participation, to develop its budget for the EMSS and its subsystems. The strategic planning processes utilize data from state EMSS evaluations and/or specific statewide needs assessment processes. Regardless of which of these sources of overall baseline information is used, the planning process utilizes on-going system performance improvement data to make budgetary decisions.

Indicator 2.a.i.2	Scoring
There is an established method of collecting EMSS financial data from all health care facilities and EMS agencies including patient charges as well as administrative and system costs.	0. Not known
	1. Financial data are not collected as part of the EMS information system (EMSIS).
	2. Financial data are collected as part of the EMSIS at individual facilities and agencies but are not reported to the lead agency.
	3. Financial data are collected as part of the EMSIS and are analyzed and reported by the lead agency.
	4. Financial data from the EMSIS are linked with at least one other source of cost data such as hospital discharge data.
	5. Financial data are routinely derived from the EMSIS, insurers, emergency department, hospital discharge, death certificate and rehabilitation data and, along with data on general EMSS infrastructure costs, are used to assess cost/benefit of the system. A method exists to investigate,

	diagnose and intervene in problems identified.
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ii. Diagnose/Investigate

See 2.a.i.2.

See 2.a.i.3 on resource assessment.

b. Policy Process

i. Inform & Organize

See 2.a.i.1 (includes stakeholder participation).

ii. Develop Policies

Indicator 2.b.ii.1	Scoring
There is funding of the EMSS and its lead agency.	0. Not known
	1. There is no specific funding to support the EMSS lead agency and other EMSS infrastructure.
	2. Occasional funding has been directed at EMSS infrastructure support, and appropriations have been made to the lead agency budget for this purpose.
	3. Occasional funding has been directed at EMSS infrastructure support, and appropriations have been made to the lead agency budget for this purpose. More stable sources of funds have been identified, but the funds have not been appropriated for EMSS.
	4. Consistent, though limited, infrastructure funding has been appropriated to the lead agency budget.
	5. The legislature has identified and appropriated infrastructure funding from general fund and non-lapsing sources for the lead agency which is consistent with its legislated responsibilities.

c. Assurance Process

i. Enforce Policies

ii. Provide Services

iii. Evaluate

See 1.c.iii.1 on annual reporting

3. Resource Management Subsystems - Human Resources

a. Assessment Process

i. Monitor

Indicator 3.a.i.1	Scoring
A performance standard has been established for prehospital licensed/certified personnel turnover rate. The NHTSA Performance Measures (PM) Indicator “2- Annual Turnover Rate” or a similar measure has been adopted as a statewide PM indicator and data contributing to it are routinely collected, results analyzed and interventions sought where necessary on a local, regional, and state level.	0. Not known
	1. There is no such performance standard or PM indicator and none is planned at this time.
	2. Such a performance standard and PM indicator have been adopted on a jurisdiction by jurisdiction basis without statewide coordination.
	3. There is no such performance standard or PM indicator, or they have been adopted on a jurisdiction by jurisdiction basis without statewide coordination, but both are planned for statewide implementation within the next year.
	4. This performance standard and PM indicator have been established on a statewide basis and data are now being collected, results analyzed and interventions sought as identified. Statewide performance does not meet the performance standard as a whole.
	5. This performance standard and PM indicator have been adopted as a statewide PM indicator and data contributing to it are routinely collected, results analyzed and interventions sought where necessary on a local, regional, and state level. Statewide performance meets or exceeds the performance standard as a whole.

See 2.a.i.3 on resource assessment.

ii. Diagnose/Investigate

See 2.a.i.3 on resource assessment.

b. Policy Process

i. Inform & Organize

Indicator 3.b.i.1	Scoring
Education for EMSS participants is developed based on a review and evaluation of EMSS information system (EMSIS) or other system performance data.	0. Not known
	1. There is no correlation between training programs for providers and the EMSIS or other data.
	2. There is limited use of EMSIS reports or other

	data to target educational opportunities.
	3. There is evidence that some providers are using EMSIS reports or other data to identify educational needs and to incorporate them into training programs.
	4. There is written documentation (e.g. meeting minutes) that many educational forums have been conducted based on EMSS data, their use in ongoing performance improvement processes and review by medical direction.
	5. Written evidence exists that EMS education opportunities are routinely impacted by regular reviews of EMS system performance.

ii. Develop Policies

Indicator 3.b.ii.1	Scoring
The EMSS lead agency has adopted scopes of practice consistent with national standards.	0. Not known.
	1. The EMSS lead agency has neither guidance nor requirements for scopes of practice in the licensure/certification of EMS personnel.
	2. The EMSS lead agency has some guidance or requirements for scopes of practice in the licensure/certification of EMS personnel. These reflect a minimum or maximum scope of practice with much jurisdictional or regional variation.
	3. The EMSS lead agency has extensive guidance and requirements for scopes of practice in the licensure/certification of EMS personnel. These have established fairly uniform practices across the state with some local variation. These do not reflect impact from the National EMS Scope of Practice Model, nor is there a plan for bridging to that Model.
	4. The EMSS lead agency has extensive guidance and requirements for scopes of practice in the licensure/certification of EMS personnel. These have established fairly uniform practices across the state with some local variation. These may or may not reflect impact from the National EMS Scope of Practice, but there is there a clear EMSS lead agency plan for bridging to that model.
	5. The EMSS lead agency has adopted scopes of practice consistent with the National EMS Scope of Practice and these have been implemented with accompanying guidance and requirements.

Indicator 3.b.ii.2	Scoring
The EMSS lead agency requires national certification for state licensure/certification.	0. Not known.
	1. The EMSS lead agency does not require national certification for the licensure/certification of EMS personnel. It grants reciprocity on a case by case

	basis for out of state applicants. It has no plan to change these practices in the next year.
	2. The EMSS lead agency does not require national certification for the licensure/certification of EMS personnel. It grants reciprocity on a case by case basis for out of state applicants. It has plans to adopt national certification in at least some levels in the next year.
	3. The EMSS lead agency requires national certification for the licensure/certification of some, but not all, levels of EMS personnel. It grants reciprocity on a case by case basis for out of state applicants in levels for which it does not recognize national certification. It has no plan to change these practices in the next year.
	4. The EMSS lead agency requires national certification for the licensure/certification of some, but not all, levels of EMS personnel. It grants reciprocity on a case by case basis for out of state applicants in levels for which it does not recognize national certification. It has plans to adopt national certification for all levels in the next year.
	5. The EMSS lead agency requires national certification for state licensure/certification of all levels of EMS personnel.

Indicator 3.b.ii.3	Scoring
The EMSS lead agency requires national accreditation of education programs.	0. Not known.
	1. The EMSS lead agency does not require national accreditation of education programs. It has no mechanism for approving education programs or courses. It has no plan to change these practices in the next year.
	2. The EMSS lead agency does not require national accreditation of education programs. It has an internal mechanism for approving education programs or courses. It has no plan to change these practices in the next year.
	3. The EMSS lead agency does not require national accreditation of education programs. It has an internal mechanism for approving education programs or courses. It has plans to require national accreditation of paramedic education programs within the next year.
	4. The EMSS lead agency requires national accreditation of paramedic education programs. It has an internal mechanism for approving other levels of education programs or courses which includes standards that are consistent with the National EMS Education Standards. It has no plan to change these practices in the next year.
	5. The EMSS lead agency requires national

	<p>accreditation of paramedic education programs. It has an internal mechanism for approving other levels of education programs or courses until such time as national accreditation is available at one or more of these levels. This internal mechanism includes standards that are consistent with the National EMS Education Standards. It has committed to requiring national accreditation within two years of accreditation availability.</p>
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c. Assurance Process

i. Enforce Policies

Indicator 3.c.i.1	Scoring
Procedures exist for enforcing EMS personnel compliance with license/certification laws, regulations, and policies.	0. Not known.
	1. There are no laws, regulations, and policies pertaining to EMS personnel licensure/certification.
	2. There are laws, regulations, and policies pertaining to EMS personnel licensure/certification, but there are no clear enforcement procedures.
	3. There are laws, regulations, and policies pertaining to EMS personnel licensure/certification. There are multiple agencies including or instead of the EMSS lead agency involved in enforcing these, reducing the clarity of responsibility for enforcement and producing potential inter-agency conflict.
	4. There are laws, regulations, and policies pertaining to EMS personnel licensure/certification. There are multiple agencies including the EMSS lead agency involved in enforcing these, however the relationships among these seem effective and procedures should be clear to the EMS community.
	5. The EMS lead agency maintains clear procedures for enforcing personnel compliance with laws, regulations, and policies pertaining to provider licensure/certification. The EMS lead agency maintains clear procedures for enforcing personnel compliance with laws, regulations, and policies pertaining to provider licensure/certification. These include processes for adequate review and due process in enforcement.

ii. Provide Services

Indicator 3.c.ii.1	Scoring
The EMSS agency monitors and addresses workforce needs.	0. Not known.
	1. The EMSS lead agency does not formally monitor workforce needs or provide assistance for otherwise perceived workforce issues.

	2. The EMSS lead agency does not formally monitor workforce needs but makes resources such as management guidance or recruitment/retention support materials available to provider agencies upon request.
	3. The EMSS lead agency does not formally monitor workforce needs, but in response to otherwise perceived needs it routinely investigates health/safety issues, distributes management guidance or recruitment/retention support materials to provider agencies, publicizes this availability, and provides staff technical assistance as requested.
	4. The EMSS lead agency is establishing a system to formally monitor workforce needs. In the interim, it routinely investigates health/safety issues, distributes management guidance and recruitment/retention support materials to provider agencies, publicizes this availability, has developed training programs to address these issues, and provides staff technical assistance as requested.
	5. The EMSS lead agency assures an on-going needs assessment for areas of personnel shortage, trends in statewide personnel utilization, and for health/safety issues specific to the EMS working environment. Based on this on-going needs assessment, the lead agency has either documented actions to address human resources needs in the state or has documented that no significant workforce needs or provider agency management issues exist.

Indicator 3.c.ii.2	Scoring
A structured mechanism exists to implement medical direction mediated changes in protocol and treatment practices.	0. Not known
	1. There is no structured mechanism to inform or educate personnel in new protocols or treatment approaches adopted by medical direction.
	2. A structured mechanism is in place to inform or educate personnel in new protocols or treatment approaches adopted by medical direction, but it has not been tried or tested.
	3. A structured mechanism is in place to inform personnel in new protocols or treatment approaches adopted by medical direction.
	4. A structured mechanism is in place to educate personnel in new protocols and treatment approaches adopted by medical direction.
	5. A structured mechanism exists to educate personnel in new protocols and treatment approaches, as adopted by medical direction, in a timely manner. There is a method to monitor compliance with new procedures as they are instituted.

iii. Evaluate

See 1.c.iii.1 on annual reporting.

See 7.c.ii.2.

4. Resource Management Subsystems – Transportation

a. Assessment Process

i. Monitor

Indicator 4.a.i.1	Scoring
A performance standard has been established for response, scene, and transport time intervals by both mean and 90 th percentile measures. The NHTSA Performance Measures (PM) Indicators “ 10.1- Mean Emergency Patient Response Interval”, “ 10.2- 90 th Percentile Emergency Response Interval”, “ 10.3- Mean Emergency Scene Interval”, “ 10.4- 90 th Percentile Emergency Scene Interval” “ 10.5- Mean Emergency Transport Interval”, and “ 10.6- 90 th Percentile Emergency Transport Interval” , or similar measures, have been adopted as statewide PM indicators and data contributing to them are routinely collected, results analyzed and interventions sought where necessary on a local, regional, and state level.	0. Not known
	1. There are no such performance standards or PM indicators and none are planned at this time.
	2. Such performance standards and PM indicators have been adopted on a jurisdiction by jurisdiction basis without statewide coordination.
	3. There is no such performance standard or PM indicators, or they have been adopted on a jurisdiction by jurisdiction basis without statewide coordination, but both are planned for statewide implementation within the next year.
	4. This performance standard and PM indicators have been established on a statewide basis and data are now being collected, results analyzed and interventions sought as identified. Statewide performance does not meet the performance standard as a whole.
	5. This performance standard and PM indicator(or similar measures) have been adopted as a statewide PM indicator and data contributing to it are routinely collected, results analyzed and interventions sought where necessary on a local, regional, and state level. Statewide performance meets or exceeds the performance standard as a whole.

See 2.a.i.3 on resource assessment.

ii. Diagnose/Investigate

See 4.a.i.1 and 4.a.i.2.

See 2.a.i.3 on resource assessment.

b. Policy Process

i. Inform & Organize

ii. Develop Policies

Indicator 4.b.ii.1	Scoring
The lead EMSS agency has established standards for the equipping and operation EMS vehicles.	0. Not known
	1. There are no performance or review standards for EMS mobile medical and transportation services.
	2. There are performance/review standards for EMS mobile medical and transportation services, but they are incomplete and there is no documented schedule for update.
	3. There are performance/review standards for EMS mobile medical and transportation services, but they are incomplete. They will be updated and completed within the next year.
	4. There are performance/review standards for EMS mobile medical and transportation services, but there is no effort to utilize or create evidence-based standards where possible.
	5. The lead EMSS agency has established standards, drawing upon national or otherwise evidence-based standards where possible, for the equipping and operation of ground and water ambulances and other EMS vehicles, and for the clinical operations of air medical services. Performance standards have been established as policy for the indicators in section 4.a. There is a policy to inspect vehicles and/or review performance measures on a regular basis.

c. Assurance Process

i. Enforce Policies

Indicator 4.c.i.1	Scoring
The lead EMSS agency inspects vehicles and/or conducts an on-going system of performance improvement and takes action to correct inadequacies.	0. Not known
	1. There are no performance improvement or inspection standards for EMS mobile medical and transportation services.
	2. There are performance improvement or inspection standards for EMS mobile medical and transportation services, but they are incomplete or there is inadequate staff to enforce them. No changes are planned.

	3. There are performance improvement or inspection standards for EMS mobile medical and transportation services, but they are incomplete or there is inadequate staff to enforce them. Changes to rectify these inadequacies are documented to be completed within the next year.
	4. The lead EMSS agency regularly inspects vehicles and/or conducts on-going performance improvement, utilizing the standards and performance indicators it has established.. The agency's authority and latitude to take timely and effective action when inadequacies are discovered that may pose a hazard to patients or the public is limited.
	5. The lead EMSS agency conducts on-going performance improvement and/or regularly inspects vehicles utilizing the standards and performance indicators it has established. The agency is has enforcement authority, including well-defined due process procedures, to take timely and effective action when inadequacies are discovered that may pose a hazard to patients or the public.

ii. Provide Services

Indicator 4.c.ii.1	Scoring
The lead EMSS agency is empowered to provide EMS coordinating, patient care, and transportation services when deemed appropriate.	0. Not known
	1. The lead EMSS agency is not empowered to provide EMS coordinating, patient care, or transportation services.
	2. The EMSS lead agency has a role in disaster planning and mass casualty operation coordination through its role in the state's emergency operations center/emergency management agency, but has no other capabilities.
	3. The EMSS lead agency is responsible for and has the authority to lead EMSS operations in statewide disaster planning and in mass casualty events that exceed local EMS agency and hospital mutual aid capabilities. It has no other operational role.
	4. The EMSS lead agency is responsible for and has the authority to lead EMSS operations in statewide disaster planning and in mass casualty events that exceed local EMS agency and hospital mutual aid capabilities. It has the responsibility to seek, contract with and coordinate EMSS services in areas that are or become inadequately served as it determines.
	5. The EMSS lead agency is responsible for and has the authority to lead EMSS operations in statewide disaster planning and in mass casualty events that exceed local EMS agency and hospital mutual aid capabilities. It is empowered to provide

	(directly or through contract) EMS coordinating, patient care, and transportation services in areas where usual and customary EMS services have been withdrawn, or otherwise do not exist, and have been determined to be necessary.
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iii. Evaluate

See 1.c.iii.1 on annual reporting

5. Resource Management Subsystems – Facility and Specialty Care Regionalization

a. Assessment Process

i. Monitor

Indicator 5.a.i.1	Scoring
A performance standard has been established for “Major Trauma Triage to Trauma Center Rate”. The NHTSA Performance Measures (PM) Indicator “5- Major Trauma Triage to Trauma Center Rate” or a similar measure has been adopted as a statewide PM indicator and data contributing to it are routinely collected, results analyzed and interventions sought where necessary on a local, regional, and state level.	0. Not known
	1. There is no such performance standard or PM indicator and none is planned at this time.
	2. Such a performance standard and PM indicator have been adopted on a jurisdiction by jurisdiction basis without statewide coordination.
	3. There is no such performance standard or PM indicator, or they have been adopted on a jurisdiction by jurisdiction basis without statewide coordination, but both are planned for statewide implementation within the next year.
	4. This performance standard and PM indicator have been established on a statewide basis and data are now being collected, results analyzed and interventions sought as identified. Statewide performance does not meet the performance standard as a whole.
	5. This performance standard and PM indicator have been adopted as a statewide PM indicator and data contributing to it are routinely collected, results analyzed and interventions sought where necessary on a local, regional, and state level. Statewide performance meets or exceeds the performance standard as a whole.

Indicator 5.a.i.2	Scoring
A performance standard has been established for “STEMI Triage to Specialty Center Rate”. The NHTSA Performance Measures (PM) Indicator “9- STEMI Triage to Specialty Center Rate” or a similar measure has been adopted as a statewide PM indicator and data contributing to it are routinely collected, results analyzed and interventions sought where necessary on a local, regional, and state level.	0. Not known
	1. There is no such performance standard or PM indicator and none is planned at this time.
	2. Such a performance standard and PM indicator have been adopted on a jurisdiction by jurisdiction

	basis without statewide coordination.
	3. There is no such performance standard or PM indicator, or they have been adopted on a jurisdiction by jurisdiction basis without statewide coordination, but both are planned for statewide implementation within the next year.
	4. This performance standard and PM indicator have been established on a statewide basis and data are now being collected, results analyzed and interventions sought as identified. Statewide performance does not meet the performance standard as a whole.
	5. This performance standard and PM indicator have been adopted as a statewide PM indicator and data contributing to it are routinely collected, results analyzed and interventions sought where necessary on a local, regional, and state level. Statewide performance meets or exceeds the performance standard as a whole.

See 2.a.i.3 on resource assessment.

ii. Diagnose/Investigate

See 5.a.i.1, 5.a.1.a.2, and 5.b.ii.2

See 2.a.i.3 on resource assessment.

b. Policy Process

i. Inform & Organize

Indicator 5.b.i.1	Scoring
The EMSS lead agency brings stakeholder organizations together to implement and improve EMSS specialty care subsystems (e.g. trauma, cardiac, stroke, pediatric).	0. Not known.
	1. There is no evidence of partnerships, alliances, or organizations working together to implement and maintain specialty care subsystems.
	2. There have been limited attempts to organize groups, but to date no ongoing subsystem committees are meeting regularly to design or implement specialty care subsystems of the EMSS.
	3. The lead agency has at least one on-going committee with broad stakeholder representation meeting regularly to develop and implement a specialty care subsystem.
	4. The lead agency has two or more on-going committees with broad stakeholder representation meeting regularly to develop and implement specialty care subsystems.
	5. The lead agency has two or more on-going committees with broad stakeholder representation meeting regularly to develop and implement specialty care subsystems (e.g. trauma, cardiac, stroke, pediatric). These are formally organized as multidisciplinary, multi-agency subcommittees of the state EMSS body. Their plans are integrated effectively into the statewide EMSS plan and its on-going review and improvement, and subsystem components coordinate well

	through the lead agency and body (e.g. medical direction subsystem development of prehospital protocols draws upon representatives of specialty care subsystems for protocols in those areas).
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ii. Develop Policies

Indicator 5.b.ii.1	Scoring
There is a legislatively authorized process for the designation of specialty care facilities.	0. Not known
	1. There is no process for the designation of specialty care facilities.
	2. There is no process for the designation of specialty care facilities but such a process is being planned for implementation within the next two years.
	3. There is a process for the designation of at least one type of specialty care subsystem facilities.
	4. There is a process for the designation of one or more types of specialty care subsystem facilities. This process is linked to the EMSS lead agency and can be used as a template for designation of other specialty care subsystem facilities.
	5. There is a legislatively authorized process for the designation of specialty care facilities that is governed by the EMSS lead agency and its specialty care subsystem committees. The lead agency is actively designating and monitoring specialty care facilities as components of at least two subsystems (e.g. trauma, cardiac, pediatric, burn).

Indicator 5.b.ii.2	Scoring
For each specialty care subsystem statewide, the definition of patients who qualify for transfer to another level of specialty care facility is standard and those transfers are routinely made in a timely fashion.	0. Not known
	1. There is no standard definition of transfer “qualifying patient” in any specialty care subsystem or region. Such decisions are ad hoc and rely on relationships and experience between referring and receiving providers and facilities.
	2. There are fragmented processes within specialty care subsystems, based around specialty centers on a regional basis, which may or may not have “qualifying patient” definitions and procedures for transfer.
	3. A standard definition of transfer “qualifying patient” and statewide processes to implement transfers based on it should be in place in at least one specialty care subsystem within a year.
	4. A standard definition of transfer “qualifying patient” and statewide processes to implement transfers based on it are in place in at least one specialty care subsystem. These are linked to

	performance improvement and medical direction review subsystems, and updated as needed on a statewide basis.
	5. A standard definition of transfer “qualifying patient” and statewide processes to implement transfers based on it are in place in two or more specialty care subsystems. These are linked to performance improvement and medical direction review subsystems, and updated as needed on a statewide basis.

Indicator 5.b.ii.3	Scoring
State EMSS-wide prehospital triage criteria exist to ensure appropriate emergency transport to specialty care centers.	0. Not known
	1. There are no formal triage criteria to ensure qualifying patients are transported to the most appropriate specialty facility.
	2. There are differing triage criteria guidelines used by different providers or jurisdictions.
	3. State EMSS-wide prehospital triage criteria are being developed and should be in place within the next year for at least one subspecialty system.
	4. State EMSS-wide prehospital triage criteria are in place for at least one subspecialty system. These are linked to performance improvement and medical direction review for appropriateness in identifying qualifying patients and in ensuring that they are transported to the appropriate specialty care facility.
	5. State EMSS-wide prehospital triage criteria are in place for two or more specialty care subsystems (e.g. the ACS/COT Trauma Field Triage Criteria for any trauma system). These are linked to performance improvement and medical direction review for appropriateness in identifying qualifying patients and in ensuring that they are transported to the appropriate specialty care facility. Sensitivity and specificity (over- and under-triage rates) of the criteria used are regularly reported through the EMSS lead authority. Updates to the triage criteria are made as necessary to improve system performance.

Indicator 5.b.ii.4	Scoring
The EMSS has designated regional, accountable systems of care.	0. Not known
	1. There has been no coordinated attempt to designate specialty care facilities therefore there is no basis upon which to base such regionalization.
	2. Some facilities have been designated in at least one subsystem of specialty care and regions are beginning to emerge informally.

	<p>3. There is a coordinated effort linked to or governed by the EMSS lead agency to designate facilities in at least one specialty care subsystem. Facilities have been designated and “natural” regions, based on the geographic organization of those facilities and patient flow around them, have become apparent. There is no existing system of independent or EMSS lead agency regional offices/programs or those that do exist have boundaries other than those of the emerging natural regions.</p>
	<p>4. There is a coordinated effort linked to or governed by the EMSS lead agency to designate facilities in at least one specialty care subsystem. Facilities have been designated and “natural” regions, based on the geographic organization of those facilities and patient flow around them, have become apparent. The EMSS lead agency is fostering an initiative to realign or establish meaningful infrastructure services around these new regions to establish accountable systems of care and is working with current EMS regions in states where they exist.</p>
	<p>5. Specialty care center designation processes in two or more specialty care subsystems are mature. “Natural” regions, based on the geographic organization of those facilities and patient flow around them, have become apparent. The EMSS lead agency has developed a participatory, representative process for the designation of regional, accountable systems of care, including the ability to negotiate regional boundaries as necessary, and has designated these. It has included emergency management, emergency health preparedness, and public safety partners in these discussions in order coordinate regional response organization. Where necessary, the EMSS lead agency has established processes and perhaps administrative infrastructure, to support planning, implementation and coordination of regional system development.</p>

Indicator 5.b.ii.5	Scoring
A mature EMS for children specialty care subsystem exists.	0. Not known
	<p>1. The emergency medical services for children (EMSC) specialty care subsystem has none of the following: an EMSC specialty care subsystem committee of the lead agency, a legislatively authorized facility recognition system for pediatrics, a formal definition of “qualifying pediatric patient” for the purpose of transfer to a facility more highly recognized for pediatric care, and prehospital triage criteria for pediatrics.</p>

	2. The emergency medical services for children (EMSC) specialty care subsystem has begun to develop as reflected by the existence of one of the following: an EMSC specialty care subsystem committee of the lead agency, a legislatively authorized facility recognition system for pediatrics, a formal definition of “qualifying pediatric patient” for the purpose of transfer to a facility more highly recognized for pediatric care, and prehospital triage criteria for pediatrics.
	3. The emergency medical services for children (EMSC) specialty care subsystem is developing well as reflected by the existence of two of the following: an EMSC specialty care subsystem committee of the lead agency, a legislatively authorized facility recognition system for pediatrics, a formal definition of “qualifying pediatric patient” for the purpose of transfer to a facility more highly recognized for pediatric care, and prehospital triage criteria for pediatrics.
	4. The emergency medical services for children (EMSC) specialty care subsystem has begun to mature as reflected by the existence of three of the following: an EMSC specialty care subsystem committee of the lead agency, a legislatively authorized facility recognition system for pediatrics, a formal definition of “qualifying pediatric patient” for the purpose of transfer to a facility more highly recognized for pediatric care, and prehospital triage criteria for pediatrics.
	5. The emergency medical services for children (EMSC) specialty care subsystem is mature as reflected by the existence of an EMSC specialty care subsystem committee of the lead agency, a legislatively authorized facility recognition system for pediatrics, a formal definition of “qualifying pediatric patient” for the purpose of transfer to a facility more highly recognized for pediatric care, and prehospital triage criteria for pediatrics.

c. Assurance Process

i. Enforce Policies

Indicator 5.c.i.1	Scoring
The EMSS lead agency enforces laws, rules, and regulations concerning the designation of specialty care centers, including the ability to de-designate facilities for matters of noncompliance.	0. Not known

	1. The lead agency does not have the authority to de-designate facilities for matters of noncompliance.
	2. The lead agency has the authority to de-designate facilities for matters of noncompliance but does not monitor facility performance.
	3. The lead agency has the authority to de-designate facilities for matters of noncompliance and monitors facility performance.
	4. The lead agency has the authority to de-designate facilities for matters of noncompliance, monitors facility performance, and has taken one or more administrative actions to bring noncompliant facilities into compliance. The development of regional, accountable systems of care with adequate infrastructure is underway. Planning to delegate to these regions the authority to review and de-designate facilities and take other corrective actions is on-going.
	5. Facilities are represented in the regional, accountable systems of care performance improvement processes and benchmark their performance against local and national standards. Issues of noncompliance are monitored and addressed as part of the regional performance improvement process. De-designation is reserved only as a final public health safeguard and is delegated to the regions.

See 5.b.ii.2.

ii. Provide Services

Indicator 5.c.ii.1	Scoring
There is authority and adequate budget for an EMSS lead agency medical director.	0. Not known
	1. There is no requirement for an EMSS medical director, and no job description or budget has been developed.
	2. Authority, budget and job description for an EMSS medical director are being developed.
	3. Some parts of authority, budget, and job description are in place and a medical director is serving on a volunteer or part-time basis.
	4. There is authority, budget, and job description for a part-time EMSS medical director and one is in place. The job description includes requisite education, training, and certification for this position
	5. There is authority, budget, and job description for a full-time EMSS medical director and one is in place. The job description includes requisite education, experience, and certification for this position.

Indicator 5.c.ii.2	Scoring
The EMSS lead agency has incorporated rehabilitation services, within the EMSS plan and specialty care facilities standards.	0. Not known
	1. There are no written standards or plans for the integration of rehabilitation services within the EMSS or with specialty care facilities.
	2. The EMSS plan has incorporated the use of rehabilitation services, but the use of those facilities for EMSS patients has not been fully realized.
	3. The EMSS plan has incorporated requirements for rehabilitation services. The specialty care centers routinely use the rehabilitation expertise although written agreements do not exist.
	4. The EMSS plan incorporates rehabilitation services throughout the continuum of care. Specialty care centers have actively included rehabilitation services and their programs in EMSS patient care plans.
	5. There is evidence to show a well-integrated program of rehabilitation is available for all EMSS patients. Rehabilitation programs are included in the EMSS plan, and specialty care centers work closely with rehabilitation centers and services to ensure quality outcomes for EMSS patients.

Also see 5.b.ii.2 and 5.b.ii.3.

iii. Evaluate

See 1.c.iii.1 on annual reporting.

6. Public Access and Communications Subsystems

a. Assessment Process

i. Monitor

Indicator 6.a.i.1	Scoring
There is a regularly updated statewide communications index of EMS agencies, emergency medical dispatch centers, and hospitals.	0. Not known
	1. There is no such index, and none is planned at this time.
	2. There is no such index, but one is planned within the next year.
	3. There is an index listing some of these elements, with no plans to add elements.
	4. There is an index listing some of these elements, with plans to add all elements within the next year.
	5. There is a regularly updated statewide index of EMS agencies, emergency medical dispatch centers, and hospitals listing their (as appropriate) emergency access type (9-1-1, E-9-1-1, other), direct ten-digit dispatch number, ten-digit business number, dispatch voice frequency, dispatch data frequency, field to hospital frequency/ies, hospital to hospital frequency/ies, EMS tactical frequency/ies, broadband or wideband frequency/ies and purpose. The index also lists major communications system assets (at least fixed radio consoles and mobile units, towers, base stations, and recording equipment) by date and type.

ii. Diagnose/Investigate

See 6.b.ii.1 “Develop Policies”

b. Policy Process

i. Inform & Organize

Indicator 6.b.i.1	Scoring
A public safety/emergency management statewide interoperability executive committee produces and disseminates a statewide public safety statewide communications interoperability plan (SCIP). The EMSS is represented.	0. Not known
	1. There is no SIEC or similar committee, and there is no current SCIP or EMSS communications plan.
	2. There is a statewide interoperability committee which meets on an ad hoc basis or otherwise infrequent basis and has little meaningful coordinating activity. There is no current EMSS communications plan.
	3. There is a statewide interoperability committee which meets on an ad hoc basis or otherwise infrequent basis and has little meaningful

	coordinating activity for the EMSS. There is a current EMSS communications plan and the EMSS lead agency disseminates the plan and a system users guide.
	4. There is an SIEC or similar committee which meets regularly and is developing a SCIP with multidisciplinary, multiagency input which will integrate the EMSS communications plan. The SIEC plans to then develop a systems users guide.
	5. The Statewide Interoperability Executive Committee (SIEC) or similarly named and functioning body with EMSS representation produces and disseminates a public safety statewide communications interoperability plan (SCIP) integrating the EMSS communications system plan. In addition, a "system users guide" is produced which explains NIMS and SafeCom compliant policies and procedures for participation in the public safety communications interoperable system (e.g. use of interoperability channels in major events and plain language usage at all times).

ii. Develop Policies

Indicator 6.b.ii.1	Scoring
A public safety/emergency management statewide interoperability executive committee is authorized as a policy-making body.	0. Not known
	1. There is no SIEC or similar committee.
	2. There is a statewide interoperability committee which meets on an ad hoc basis or otherwise infrequent basis and has little meaningful coordinating activity.
	3. There is a statewide interoperability committee which meets on an ad hoc basis or otherwise infrequent basis, has developed and oversees a SCIP, but has little meaningful coordinating activity for the EMSS.
	4. There is an SIEC or similar committee which meets regularly and is developing a SCIP which will integrate the EMSS communications plan. The SIEC or similar body has the authority to enforce communications interoperability policies, including use of public safety frequencies within the state as allowed by FCC rules.
	5. There is an authorized, adequately funded SIEC within the executive branch to plan, coordinate, implement, manage, and enforce policies for interoperable communications including instate frequency coordination. The EMSS is actively represented on the SIEC.

c. Assurance Process
i. Enforce Policies

Indicator 6.c.i.1	Scoring
There is a statewide coordinated system for the development, implementation, and ongoing evaluation of emergency medical dispatch (EMD) protocols	0. Not known
	1. There are no EMD protocols.
	2. EMD protocols have been adopted on a limited jurisdiction by jurisdiction basis without statewide coordination or regard to the design of the EMSS.
	3. EMD protocols have been adopted on a widespread jurisdiction by jurisdiction basis without statewide coordination, EMSS medical direction oversight for the most part, or regard to the design of the EMS system, but are not in conflict with EMSS design.
	4. EMD protocols have been developed without statewide coordination but in close coordination with EMSS medical direction oversight in most jurisdictions and are congruent with EMSS design.
	5. EMD protocols have been developed with statewide coordination and with EMSS medical direction oversight. It is recognized that EMD protocols for resource dispatch must be specific to the resources present in any given locale and decisions on these protocols must reflect input of those locales. There are established procedures to involve representatives of EMD staff in EMD and EMSS performance improvement and a “feedback loop” to change protocols or to update dispatcher education when appropriate. These protocols include, but are not limited to, which resources to dispatch (for example, Advanced Life Support (ALS) versus Basic Life Support (BLS), use of lights and sirens mode, early notification of the air medical and specialty facility resources, pre-arrival instructions, and other procedures necessary to ensure resources dispatched are consistent with the needs of emergency patients.

Indicator 6.c.i.2	Scoring
Public Safety Answering Points (PSAPs) implement emergency medical dispatch.	0. Not known
	1. PSAPs do not utilize EMD.
	2. PSAPs have begun to train staff in EMD.
	3. All PSAPs have some level of EMD trained staff.
	4. All emergency callers to PSAPs are assured of interaction with EMD trained staff.
	5. All emergency callers to PSAPs are assured of

	interaction with EMD certified staff in a facility whose EMD program has a medical director and has been reviewed and approved/certified by the EMSS lead agency.
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See also 6.b.ii.1 “Develop Policies”

ii. Provide Services

Indicator 6.c.ii.1	Scoring
There is a universal access number (9-1-1) for citizens to access the EMSS, with dispatch of appropriate medical resources.	0. Not known
	1. There are still locales without a universal access number (9-1-1) for easy citizen access to the EMSS.
	2. There is a universal access number (9-1-1) for quick citizen access to care, though wireless 9-1-1 is not universally reliable.
	3. A universal access number (9-1-1) is reliably available for all landline and wireless callers statewide.
	4. A universal access number (9-1-1) is reliably available for all landline and wireless callers statewide and is integrated with all EMS jurisdictions’ central communication systems under the statewide EMSS communications plan.
	5. State-of-the-art electronic, seamlessly linked citizen access (9-1-1) and dispatch communication systems are available within all jurisdictions and utilize state-of-art EMD and other dispatch procedures routinely evaluated in an on-going performance improvement program.

Indicator 6.c.ii.2	Scoring
There is a statewide, coordinated communication system for the EMSS to ensure field-to-field, field-to-facility, and interfacility bi- or multi-directional communications among all system participants.	0. Not known
	1. There is no statewide coordinated communication system for triage, treatment, and transport of patients for either single or multiple patient encounters and most jurisdictions still rely on 1970’s era VHF/UHF systems. Interoperability is at “minimal” on the Interoperability Continuum (Table 3, below).
	2. There is no statewide, coordinated EMSS communication system, however many jurisdictions have updated EMS communications systems in a planned fashion. Many jurisdictions have moved beyond “minimal” on the Interoperability Continuum.
	3. Most jurisdictions have updated their EMS communications systems and they are coordinated

	on a statewide basis according to an EMSS and/or SIEC communications plan. Most jurisdictions are beyond “minimal” on the Interoperability Continuum.
	4. Many systems have begun to adopt wideband or broadband capabilities to transmit data and to access time-critical data bases (e.g. response resource status) in real-time. Most jurisdictions are at least at mid-point on the Interoperability Continuum. Evaluation of the effectiveness of the communication system is done routinely by the EMSS lead agency or as part of the SIEC.
	5. State-of-the-art electronic communication systems are available within all jurisdictions and are coordinated by an SIEC or similar body. The systems constitute a linkable statewide system that is effective in all-hazards responses, can be used as a quick call system for resources and is linked to public health and other nontraditional partners. The system is routinely evaluated on a statewide basis and affords narrowband, wideband and broadband solutions to EMS agencies and facilities in all jurisdictions. All jurisdictions are at least at mid-point, and most are at the far right on the Interoperability Continuum (below). The maturity of statewide EMSS communications interoperability is as a whole at the far right as defined by the USDHS SafeCom Interoperability Continuum.

Table 3



Homeland Security

Interoperability Continuum

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		Interoperability Continuum				
		Individual Agencies Working Independently	Informal Coordination Between Agencies	Key Multidiscipline Staff Collaboration on a Regular Basis	Regional Committee Working within a Statewide Communications Interoperability Plan Framework	
Governance						
Standard Operating Procedures		Individual Agency SOPs	Joint SOPs for Planned Events	Joint SOPs for Emergencies	Regional Set of Communications SOPs	National Incident Management System Integrated SOPs
Technology	DATA ELEMENTS	Swap Files	Common Applications	Custom Interfaced Applications	One-way Standards-Based Sharing	Two-way Standards-Based Sharing
	VOICE ELEMENTS	Swap Radios	Gateway	Shared Channels	Proprietary Shared System	Standards-Based Shared System
Training & Exercises		General Orientation on Equipment and Applications	Single Agency Tabletop Exercises for Key Field and Support Staff	Multiagency Tabletop Exercises for Key Field and Support Staff	Multiagency Full Functional Exercises Involving All Staff	Regular Comprehensive Regionwide Training and Exercises
Usage		Planned Events	Localized Emergency Incidents	Regional Incident Management	Daily Use Throughout Region	

iii. Evaluate

See 6.c.ii.1, above, “Provide Services”. See 1.c.iii.1 on annual reporting.

7. Public Information, Education and Prevention Subsystem

a. Assessment Process

i. Monitor

Indicator7.a.i.1	Scoring
There is a comparison of emergent illness/injury mortality using local, regional, statewide, and national data.	0. Not known
	1. There is no written comparison of emergent illness/injury mortality using local, regional, statewide, and national data.
	2. There is a written descriptive comparison of at least the leading cause of emergent illness/injury death using local, regional, and statewide data.
	3. There is a written descriptive, graphic, and tabular comparison of the leading cause of emergent illness/injury death using local, regional, statewide, and national data. An attempt is made to compare data to EMS system improvement efforts.
	4. There is a written descriptive, graphic, and tabular comparison of the <i>top three</i> leading causes of emergent illness/injury death using local, regional, statewide, and national data. An attempt is made to compare data to EMS system improvement efforts.
	5. There is a written descriptive, graphic, and tabular comparison of the <i>top ten</i> leading causes of emergent illness/injury death using local, regional, statewide, and national data. An attempt is made to compare data to EMS system improvement efforts.

Indicator7.a.i.2	Scoring
Collaboration exists between EMSS and public health leaders to complete emergent illness/injury risk assessments.	0. Not known
	1. No emergent illness/injury risk assessments are conducted.
	2. EMSS officials conduct emergent illness/injury assessments; however, there is no involvement of public health officials in those assessments.
	3. Public health officials, along with EMSS participants, assist with the design of emergent illness/injury risk assessments.
	4. Public health officials, along with EMSS leaders, assist with the design and analysis of emergent illness/injury risk assessments.
	5. The public health epidemiologist, along with EMSS leaders, is involved in the development

	of emergent illness/injury reports. There is clear evidence of data sharing, data linkage, and well-defined reporting roles and responsibilities.
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Indicator7.a.i.3	Scoring
The EMSS conducts a scientific consumer poll on a periodic basis to gauge expectations about the EMSS.	0. Not known
	1. No such poll is conducted or planned.
	2. Such a poll is being investigated.
	3. Such a poll is planned in the next year.
	4. Such a poll has been conducted and the results reported. The results are being utilized to focus public information and education efforts and system service development.
	5. The EMSS conducts a scientific consumer poll on a periodic basis to gauge expectations about the EMSS such as access, speed of response, and level and type of care expected. Results are utilized to focus certain public information and education activities and system service development.

ii. Diagnose/Investigate

b. Policy Process

i. Inform & Organize

Indicator7.b.i.1	Scoring
EMSS leaders (lead agency, advisory committees, and others) inform and educate about emergent illness/injury prevention and EMSS development.	0. Not known.
	1. No targeted messaging or media campaigns have begun to educate and inform community and State leaders or policy makers about either emergent illness/injury prevention needs or EMSS system development activities.
	2. Limited interfaces with policy makers and the media, aimed at both emergent illness/injury prevention and EMSS development, have occurred. Community development activities have been limited to incident-specific response opportunities.
	3. Community activities have begun with the development of targeted emergent illness/injury prevention campaigns, and there have been initial discussions with policy makers regarding EMSS development.
	4. EMS System leaders are engaging policy makers in discussions about emergent illness/injury prevention and the EMSS. Examples are evident of media awareness and media messaging targeted at emergent illness/injury prevention activities.

	5. A well-orchestrated and continuing EMMSS media campaign is evident. There is clear evidence that key policy makers at the State, regional, and local levels are keenly aware of the benefits of the EMSS and of the importance of emergent illness/injury prevention programs.
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ii. Develop Policies

c. Assurance Process

i. Enforce Policies

ii. Provide Services

Indicator7.c.ii.1	Scoring
The EMSS lead agency has developed or adopted a community outreach informed self-determination program to help communities determine the type of local EMS system and level of public cost they prefer.	0. Not known.
	1. The EMSS lead agency does not provide community EMS system assessment or informed self-determination services (generically, a process through which communities are encouraged to evaluate their local EMSS, learn about alternative levels and type of EMS response and their comparative costs and then determine the type of system and level of public cost they prefer).
	2. The EMSS lead agency refers communities seeking such services to known suppliers of such services.
	3. The EMSS lead agency provides some guidance materials, advice, and information on suppliers of such services.
	4. The EMSS lead agency has developed a formal technical assistance package for communities which includes a detailed explanation of community EMS assessment methods, informed self-determination processes, and limited staff consultation.
	5. The EMSS lead agency has developed a formal technical assistance package for communities which includes a detailed explanation of community EMS system evaluation methods and informed self-determination processes. It has developed or adapted its own informed self-determination program (generically, a process through which communities are encouraged to evaluate their local EMSS, learn about alternative levels and type of EMS response and their comparative costs and then determine the type of system and level of public cost they prefer), and provides a range of staff support, guidance materials and subsidies to encourage adoption of the program.

Indicator7.c.ii.2	Scoring
The EMSS lead agency has developed or adopted a program to better enable provider agency leaders to effect public information, education, and relations (PIER) programs utilizing NHTSA and other materials.	0. Not known.
	1. The EMSS lead agency does not provide PIER support services for provider agencies.
	2. The EMSS lead agency makes PIER support materials available to provider agencies upon request.
	3. The EMSS lead agency routinely distributes PIER support materials to provider agencies, and publicizes this availability.
	4. The EMSS lead agency routinely distributes PIER support materials to provider agencies, publicizes this availability, and provides staff technical assistance as requested. This effort encourages consideration of EMS based community health services (“community paramedicine”) as a means of meeting community health needs and strengthening local EMS response or other programs appropriate to the health needs of the state’s various community types.
	5. The EMSS lead agency routinely distributes PIER support materials to provider agencies, publicizes this availability, and provides staff technical assistance as requested. This program includes not only robust resources on raising the profile of the local EMSS and emergency illness/injury prevention efforts in the community, but enables agency leaders to explore opportunities to become involved in directly meeting preventive health, primary care and other needs in the community in order to strengthen the clinical base and response capabilities of the agency. This effort encourages consideration of EMS based community health services (“community paramedicine”), or other programs appropriate to the health needs of the state’s various community types, and offers technical assistance in approaching issues such as medical direction and training for such services.

iii. Evaluate

See 1.c.iii.1 on annual reporting

8. Clinical Care, Integration of Care, and Medical Direction Subsystem

a. Assessment Process

i. Monitor

Indicator 8.a.i.1	Scoring
The NHTSA Performance Measures (PM) Attributes “17.1- Call Complaint Distribution” and “17.2 – Call Complaint Rate” have been adopted as statewide PM attributes and data contributing to them are routinely collected, results analyzed at all levels and system planning interventions sought where necessary on a local, regional, and state level (e.g. better matching resources to call types experienced).	0. Not known
	1. There are no such PM attributes for which data is collected and none are planned at this time.
	2. Such PM attributes have been adopted on a jurisdiction by jurisdiction basis without statewide coordination.
	3. There are no such PM indicators, or they have been adopted on a jurisdiction by jurisdiction basis without statewide coordination, but are planned for statewide implementation within the next year.
	4. These PM attribute have been established on a statewide basis and data are now being collected, but analysis of results have not been integrated into planning processes.
	5. These PM attributes have been adopted on a statewide basis and data contributing to them are routinely collected, results analyzed at all levels and system planning interventions sought where necessary on a local, regional, and state level (e.g. better matching resources to call types experienced).

Indicator 8.a.i.2	Scoring
A performance standard has been established for prehospital relief of pain. The NHTSA Performance Measures (PM) Indicators “6.1- Pain Relief Rate”, “6.2- Pain Worsened Rate”, and “6.3- Pain Unchanged Rate” have been adopted as statewide PM indicators and data contributing to them are routinely collected, results analyzed and interventions sought where necessary on a local, regional, and state level.	0. Not known
	1. There is no such performance standard or PM indicators and none is planned at this time.
	2. Such a performance standard and PM indicators have been adopted on a jurisdiction by jurisdiction basis without statewide coordination.
	3. There is no such performance standard or PM indicators, or they have been adopted on a

	jurisdiction by jurisdiction basis without statewide coordination, but both are planned for statewide implementation within the next year.
	4. This performance standard and these PM indicators have been established on a statewide basis and data are now being collected, results analyzed and interventions sought as identified. Statewide performance does not meet the performance standard as a whole.
	5. This performance standard and these PM indicators have been adopted statewide and data contributing to them are routinely collected, results analyzed and interventions sought where necessary on a local, regional, and state level. Statewide performance meets or exceeds the performance standard as a whole.

Indicator 8.a.i.3	Scoring
A performance standard has been established for “EMS Cardiac Arrest Survival Rate to Hospital Discharge”. The NHTSA Performance Measures (PM) Indicator “ 18.2- EMS Cardiac Arrest Survival Rate to Hospital Discharge” has been adopted as a statewide PM indicator and data contributing to it are routinely collected, results analyzed and interventions sought where necessary on a local, regional, and state level.	0. Not known
	1. There is no such performance standard or PM indicator and none is planned at this time.
	2. Such a performance standard and PM indicator have been adopted on a jurisdiction by jurisdiction basis without statewide coordination.
	3. There is no such performance standard or PM indicator, or they have been adopted on a jurisdiction by jurisdiction basis without statewide coordination, but both are planned for statewide implementation within the next year.
	4. This performance standard and PM indicator have been established on a statewide basis and data are now being collected, results analyzed and interventions sought as identified. Statewide performance does not meet the performance standard as a whole.
	5. This performance standard and PM indicator have been adopted as a statewide PM indicator and data contributing to it are routinely collected, results analyzed and interventions sought where necessary on a local, regional, and state level. Statewide performance meets or exceeds the performance standard as a whole.

Indicator 8.a.i.4	Scoring
A performance standard has been established for at least one additional indicator of system interest in expanding its role to meet the changing needs of the patient population. This measure might involve the rate of red light and siren use (indicating changing response practice and/or call urgency), the rate of non-transports by patient complaint (indicating greater frequency of non-emergency care) or some other indicator of the EMS system adapting to meet other patient needs. Data contributing to it are routinely collected, results analyzed and interventions sought where necessary on a local, regional, and state level.	0. Not known
	1. There is no such performance standard or PM indicator and none is planned at this time.
	2. Such a performance standard and PM indicator have been adopted on a jurisdiction by jurisdiction basis without statewide coordination.
	3. There is no such performance standard or PM indicator, or they have been adopted on a jurisdiction by jurisdiction basis without statewide coordination, but both are planned for statewide implementation within the next year.
	4. This performance standard and PM indicator have been established on a statewide basis and data are now being collected, results analyzed and interventions sought as identified. Statewide performance does not meet the performance standard as a whole.
	5. This performance standard and PM indicator have been adopted as a statewide PM indicator and data contributing to it are routinely collected, results analyzed and interventions sought where necessary on a local, regional, and state level. Statewide performance meets or exceeds the performance standard as a whole.

ii. Diagnose/Investigate

See 8.a.i.1 through 8.a.i.4

b. Policy Process

i. Inform & Organize

Indicator 8.b.i.1	Scoring
There is a clear-cut organization of information flow, authority and responsibility for medical direction from the state level through the local level.	0. Not known
	1. There is no statewide EMSS medical direction committee system.
	2. There have been informal efforts to organize multijurisdictional or regional committees of local

	medical directors and others to standardize protocols, performance improvement mechanisms and other processes.
	3. There is a distinct and uniform history of organizing medical committees on the regional and/or state levels to pursue standardization of practices and processes. There is no legislated authorization of this structure and therefore no formal authority, responsibility or protections from liability.
	4. There is a distinct and uniform history of organizing medical committees on the regional and/or state levels to pursue standardization of practices and processes. There is no legislated authorization of this structure and therefore no formal authority or responsibility for these committees. Responsibility for protocol adoption and other related activities may be vested in individuals at the local level promoting fragmentation of practice across regions and the state, or at the regional or state levels where input into decision-making may be uneven.
	5. There is a clear-cut organization and division of legal authority and responsibility for medical direction and for information flow involved in the processes of protocol adoption, performance improvement, and restricting the practice of prehospital care providers as described in 8.b.ii.1. As dictated by the size and complexity of the statewide, regional and local systems there are medical committees at appropriate levels to encourage and facilitate the flow of information and input to fuel these processes and to serve as deliberative bodies in these processes. Ultimate authority and responsibility for medical direction is specified in statute and extends from the state medical director through the statewide medical committee to regional medical directors to regional medical committees to local medical directors and providers as appropriate.

ii. Develop Policies

Indicator 8.b.ii.1	Scoring
There is clearly defined legal authority and responsibility for the EMSS medical direction subsystem.	0. Not known
	1. There is no statewide EMSS medical direction system or formal medical directors at any but the local level, and these are not consistent from jurisdiction to jurisdiction in function or responsibility/authority.
	2. There is EMS system medical direction on the local, regional and/or state levels. Some medical directors have a written job description; however, these individual generally have no specific EMSS-

	derived legal authority or time allocated for those tasks.
	3. There is a loose EMSS medical direction subsystem with a statewide EMSS medical director, with medical directors often having written job descriptions, but with no specific legal authority above the local level. Local medical directors have adopted protocols, have in some cases implemented performance improvement programs, and are generally taking steps to improve the medical appropriateness of the EMS system. There is some activity on a regional or statewide basis to bring uniformity to these processes.
	4. There is a distinct EMSS medical direction subsystem with uniform job descriptions for medical directors on the state, and regional and/or local levels as applicable. There is legislated authority to adopt protocols and performance improvement programs at the local or regional level. If such authority is at the local level, there is formal activity at the regional and/or state level to standardize these.
	5. There is clearly defined legal authority and responsibility for the EMSS medical direction subsystem including the authority and responsibility to adopt protocols, to implement a performance improvement system, to restrict the practice of prehospital care providers, and to generally ensure medical appropriateness of the EMS system. There is a paid statewide EMSS medical director from whom this statutory authority and responsibility extends, and with it limitations on liability, to regional and, where applicable, local medical directors. The system for creating protocols lies at the state level but is the responsibility of the state and regional medical directors as a group with input from local medical directors, other physicians and EMS providers and with opportunities for local variation approved by the lead agency.

c. Assurance Process

i. Enforce Policies

Indicator 8.c.i.1	Scoring
The EMSS lead agency enforces, utilizing well-defined standards, policies, procedures, and authority, enforcement of all prehospital clinical practice.	0. Not known
	1. There are no clinical standards to enforce.
	2. Clinical standards will be completed within the next year.
	3. Clinical standards are in effect or will be completed within the next year. There are some

	standards, policies, procedures, and authority for the enforcement of clinical practice standards, but they are incomplete.
	4. Clinical standards are in effect. There are standards, policies, procedures, and authority for the enforcement of clinical standards, however they are implemented without consideration of and therefore completely separate from, state and regional or local performance improvement systems.
	5. The EMSS lead agency enforces, utilizing well-defined standards, policies, procedures, and authority, all prehospital clinical practice. It employs a documented, effective system of performance improvement which has specific points of integration with and separation from disciplinary and other licensure/certification actions and is coordinated well with the statewide medical direction system. In all enforcement practices, the lead agency has well-defined procedures for adequate review and due process.

Indicator 8.c.i.2	Scoring
The EMSS lead agency trains and credentials all EMSS medical directors.	0. Not known
	1. There is no training for EMSS medical directors in the state.
	2. There is no training for EMSS medical directors in the state. Many EMSS medical directors have taken NAEMSP and other national medical director training programs out of state.
	3. There is limited training for EMSS medical directors in the state. The EMSS lead agency also provides incentives to EMSS medical directors to take NAEMSP and other national medical director training programs out of state.
	4. There is a uniform training program for EMSS medical directors that is made available on a regular basis. Most EMSS medical directors have taken this training.
	5. The EMSS lead agency requires EMSS medical directors to be credentialed. The EMSS lead agency credential requires a specific initial training program and on-going continuing education.

ii. Provide Services

iii. Evaluate

See 1.c.iii.1 on annual reporting

9. Information, Evaluation, and Research Subsystem

a. Assessment Process

i. Monitor

Indicator 9.a.i.1	Scoring
There is a thorough description of the epidemiology of emergent illness/injury mortality in the EMSS using population-based data.	0. Not known
	1. There is no thorough description of the epidemiology of emergent illness/injury mortality in the EMSS.
	2. Death certificate data have been used to describe the statewide incidence of emergent illness/injury deaths aggregating all etiologies, but no E-code reporting is available.
	3. Death certificate data, by E-code, are reported on a statewide basis, but are not reported by sub-State Jurisdictions.
	4. Death certificate data, by E-code, are reported on statewide and sub-State jurisdictions. These data are compared to national benchmarks, if available.
	5. Death certificate data, by E-code, are used as part of the overall assessment of EMSS care, including statewide rural and urban preventable mortality studies.

Indicator 9.a.i.2	Scoring
EMSS data are electronically linked, deterministically or probabilistically, from a variety of sources (e.g. trauma registry, ED discharge, vehicle crash, hospital discharge, death certificate). Note: Deterministically means with such patient identifiers as name and date of birth. Probabilistically means software is used to match likely records through such less certain identifiers as date of incident, patient age, gender, and others.	0. Not known
	1. EMSS data exist centrally or are not deterministically or probabilistically linked to other databases.
	2. EMSS data exist and can be deterministically linked through hand-sorting processes to one or more other sources.
	3. EMSS data exist and can be probabilistically linked through computer-matching processes to one or more other sources.
	4. EMSS data exist and can be deterministically and probabilistically linked through computer-matching processes and this occurs on an ad hoc basis.
	5. All EMSS data stakeholders (including insurance

	carriers, FARS, and rehabilitation, in addition to typical EMS system resources) have been identified, data access agreements executed, hardware and software resources secured, and the staff allocated to deterministically and probabilistically link, analyze, and report a variety of data sources in a timely manner and this occurs routinely.
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Indicator 9.a.i.3	Scoring
There is a process to evaluate the quality, timeliness, completeness, and confidentiality of data.	0. Not known
	1. There is no process or written policy to evaluate the quality, timeliness, completeness, and confidentiality of the data collected in the system.
	2. There is a process of evaluation and written policy but no compliance with governance. Confidentiality of information is not ensured.
	3. The process of reviewing the quality, timeliness, completeness, and confidentiality of data is just beginning. There is some compliance with a draft written policy.
	4. There are draft written policies in place for evaluating the quality (including both reliability and validity), timeliness, and completeness of data and for ensuring confidentiality.
	5. There is a comprehensive written policy and demonstrated compliance concerning data management and governance including an evaluation of the quality, timeliness, and completeness of data, with confidential protection of records ensured while allowing appropriate access for research purposes.

ii. Diagnose/Investigate

See 9.a.i.3 for issues of data diagnosis and investigation, and throughout “monitor” and “diagnose/investigate” sections of other subsystems for system clinical, administrative and operational issues.

b. Policy Process

i. Inform & Organize

Indicator 9.b.i.1	Scoring
The EMSS lead agency routinely utilizes NHTSA Performance Measures (PM) and other indicators.	0. Not known.
	1. The EMSS lead agency does not collect the data necessary to utilize these PM indicators and attributes.
	2. The EMSS lead agency collects the data necessary to utilize many if not most of these measures, but has no plan to do so.
	3. The EMSS lead agency plans to begin utilizing and reporting on these measures in the next year.

	4. The EMSS lead agency has begun to utilize and report on some of the available measures.
	5. The EMSS lead agency routinely utilizes NHTSA Performance Measures (PM) and their own created indicators (including outcome measures) and attributes to gauge the effectiveness of the EMSS at all levels and against state and national results and provides these to the public with appropriate explanation and system improvement suggestions.

Indicator 9.b.i.2	Scoring
Emergent illness/injury prevention programs use EMSS Information System (EMSIS) data to develop intervention strategies.	0. Not known
	1. There is no evidence to suggest that EMSIS data are used to determine emergent illness/injury prevention strategies.
	2. There is some evidence that EMSIS data are available for emergent illness/injury prevention program strategies, but the use of these data is limited and sporadic.
	3. EMSIS data reports are routinely provided to the emergent illness/injury prevention programs. The usefulness of the reports has not been measured, and emergent illness/injury prevention providers are just beginning to use EMSIS data reports for program strategies and decision making.
	4. EMSIS reports on the status of injury, and injury mechanisms, are routinely available to emergent illness/injury prevention providers and are used routinely to realign injury programs to target the greatest need.
	5. A well-integrated emergent illness/injury reporting system exists. Evidence is available to demonstrate how system providers routinely use EMSIS data to identify program needs, to develop strategies on program priorities, and to set annual goals for emergent illness/injury prevention.

Indicator 9.b.i.3	Scoring
The statewide multidisciplinary, multi-agency EMSS (advisory or authority) body formally assures expert review of system performance data.	0. Not known
	1. There is no statewide multidisciplinary, multi-agency EMSS committee, and there are no regular reports of system performance.
	2. There is a statewide multidisciplinary, multi-agency EMSS committee, but it does not delegate routine reviews of EMSIS data reports to a qualified body or conduct them itself.
	3. The statewide EMS committee delegated to do data review meets regularly and reviews process-type reports; no critical assessment of system

	performance has been completed.
	4. The statewide EMSS committee delegated to do data review meets regularly and routinely assesses reports from EMSIS data to determine system compliance and operational issues needing attention.
	5. The statewide multidisciplinary, multi-agency EMSS (advisory or authority) body formally delegates by rule to a statewide medical direction committee, or other similar body, the responsibility to complete regular reviews of annotated EMSIS data reports to determine and recommend the need for system modifications. This committee meets regularly with stakeholders and reviews EMSIS data reports to assess system performance over time, looking for ways to improve system effectiveness and patient outcomes.

Indicator 9.b.i.4	Scoring
General statewide, regional, and jurisdictional/local agency EMSIS data reports are generated by the EMSS.	0. Not known
	1. No EMSIS data reports are generated to evaluate and improve system performance effectiveness.
	2. Some general EMSIS information is available for the stakeholders, but it is not consistent or regular.
	3. EMSIS data reports are done on an annual basis, but are not used for decision making and evaluating system effectiveness.
	4. Routine reports are generated using EMSIS data and other databases so that the system can be analyzed, standards evaluated, and performance measured.
	5. General statewide, regional, and jurisdictional/local agency EMSIS data reports are generated by the EMSS (or by regional/ jurisdictional bodies as appropriate) no less than once per year and are made available to EMSS leaders on all levels and to other stakeholders and the public as appropriate to evaluate and improve system performance.

ii. Develop Policies

Indicator 9.b.ii.1	Scoring
There is a legislative mandate that an EMSIS is implemented and maintained by the lead agency.	0. Not known
	1. There is no EMSIS and none is planned.
	2. There is no EMSIS but one is planned for implementation in the next year.
	3. An electronic EMSIS is being implemented as a new system or in transition from a paper-based

	system.
	4. An electronic, NEMSIS-compliant EMSIS exists and most of the legislative mandate to maintain the system, to have mandatory agency participation and hospital linkage components are in place. There are plans to send at least “national level” data to NEMSIS within the next year.
	5. There is a legislative mandate that an EMSIS is implemented and maintained by the lead agency, and that all EMSS provider agencies provide data electronically on a regular, timely basis. EMSS hospitals and other facilities facilitate real-time data linkage and transmission for operational and clinical purposes (e.g. field access to patient history; on-line medical direction access to field data on patients and resources) and outcome evaluation. The EMSIS is NEMSIS-compliant and sends data to NEMSIS.

Indicator 9.b.ii.2	Scoring
There is a statewide, mandatory performance improvement (PI) system.	0. Not known
	1. There is no statewide PI system, regional PI system, or local PI.
	2. There are no statewide or regional PI systems, but many jurisdictions and/or local agencies utilize PI systems.
	3. There is no statewide PI system, but many regions and most jurisdictions and/or local agencies PI systems are documented.
	4. There is a statewide PI system in development which is or will be utilized at all levels and considers/builds upon existing regional and jurisdictional/local agency PI systems which are already in place.
	5. There is a statewide performance improvement (PI) plan implemented and mandatory at the state, regional, jurisdictional, and local agency level with dedicated, specified medical oversight. There is legislated protection from discoverability of all EMS data.

Indicator 9.b.ii.3	Scoring
State accrediting bodies/EMSS lead agency policies for educational programs require research concepts are included in EMS education content.	0. Not known
	1. No such requirements exist or are planned.
	2. No such requirements exist but planning is underway to incorporate them at some levels.
	3. No such requirements exist, planning is underway to incorporate them, and some courses cover this content now.

	4. Such requirements are in development for inclusion in all curricula within the next year.
	5. EMSS lead agency policies for educational programs require that familiarity with the scientific literature, appropriate research principles, and the value of initiating and participating in research to produce evidence-based advancement of the field are included in EMS education content.

c. Assurance Process

i. Enforce Policies

Indicator 9.c.i.1	Scoring
The state EMS lead agency enforces provider agency participation in the EMSIS and statewide performance improvement (PI) system, as well as facility participation in EMSIS for operational, clinical, and outcome evaluation purposes.	0. Not known
	1. No such requirements exist to enforce or are planned.
	2. Such requirements exist in part and are enforced as exist.
	3. Such requirements exist, and some are enforced.
	4. Such requirements exist, and complete enforcement is planned within the next year.
	5. The state EMS lead agency enforces provider agency participation in the EMSIS and statewide performance improvement (PI) system, as well as facility participation in EMSIS for operational, clinical, and outcome evaluation purposes.

ii. Provide Services

iii. Evaluate

See 1.c.iii.1 on annual reporting.

See 9.a.1.3.

10. Large Scale Event Preparedness and Response Subsystem

a. Assessment Process

i. Monitor

Indicator 10.a.i.1	Scoring
There is an MCI resource assessment.	0. Not known.
	1. There is no resource assessment of the EMSS' ability to expand its capacity to respond to mass casualty incidents for in an all-hazards approach.
	2. An assessment of the ability of some components of the EMSS to respond to a mass casualty incident has been included in all-hazards planning. This includes personnel, supplies and equipment.
	3. An assessment of the ability of all components of the EMSS to respond to a mass casualty incident has been conducted on a state-wide basis.
	4. A written inventory of system-wide MCI capacity has been completed and includes: medical reserve personnel, facility surge capacity, additional equipment resources and caches, communications interoperability, overall management structure such as NIMS (National Incident Management System) to respond and manage a catastrophic incident until Federal resources become available.
	5. There is a resource assessment of the EMSS' ability to expand its capacity to respond to mass casualty incidents (MCIs) in an all-hazards approach. The written inventory of trauma system-wide MCI capacity has been shared with, and incorporated into, broader statewide planning efforts for all-hazards responses.

ii. Diagnose/Investigate

Indicator 10.a.ii.1	Scoring
The EMSS has completed a gap analysis.	0. Not known.
	1. There are no resource standards on which to base a gap analysis.
	2. The statewide EMSS board, in conjunction with appropriate incident management personnel, has begun to develop statewide MCI response resource standards.
	3. State resource standards for EMSS response during a mass casualty incident have been developed and approved.
	4. Some components of the EMSS (e.g., prehospital EMS), have completed a gap analysis based on the adopted standards.

	5. A system-wide MCI resource gap analysis has been completed based on the system resource standards adopted.
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b. Policy Process
i. Inform & Organize

Indicator 10.b.i.1	Scoring
The EMSS plan has established clearly defined methods of integrating with other emergency preparedness plans (all-hazards).	0. Not known
	1. There is no EMSS plan and no integration between the EMSS and other emergency preparedness agencies.
	2. There is an established EMSS plan; but it is silent on emergency integration, and no evidence is present to demonstrate integrated incident management and EMS systems.
	3. The EMSS plan addresses the interaction of the EMSS lead agency, public health, and the lead emergency management system agency. Close coordination and clearly defined goals and objectives are in process and documented.
	4. The EMSS plan addresses coordination between the EMSS lead agency, public health, and the lead emergency management system agencies. Plans are integrated, and working collaboration exists and is demonstrated. Routine working drills and training exercises are incorporated into operational plans.
	5. The EMSS plan addresses the lead agency coordination among EMS, public health, public safety, and emergency management. Plans are well integrated and include annual multidisciplinary exercises to test this capability using scenarios based on risk vulnerability assessment and Homeland Security Exercise and Evaluation Program (HSEEP) guidelines. Results from drills and live responses are used to further improve the plans and processes. The plan describes means to allow EMS resources to be used across jurisdictions, both intrastate and interstate, using the Emergency Management Assistance Compact and NIMS.

Indicator 10.b.i.2	Scoring
The EMSS plan includes identification of additional resources (both manpower and equipment) necessary to respond to a mass casualty event and utilizes NIMS compliant resource typing definitions to describe these.	0. Not known
	1. The EMSS plan does not include the identification of additional resources necessary to respond to mass casualty incidents.
	2. The EMSS system plan addresses mass casualty incidents but has not identified additional resources.

	3. The EMSS plan identifies resources, but it is unclear how the needs are going to be met.
	4. The EMSS plan identifies both equipment and manpower resources available currently and additional resources needed, but does not utilize NIMS compliant resource typing definitions to describe these. It also defines a process for securing and ensuring that equipment and human resources are available.
	5. There is a well-drafted and rehearsed EMSS plan, along with sufficient caches of equipment and personnel, to ensure the rapid deployment of additional resources during mass casualty incidents and utilizes NIMS compliant resource typing definitions to describe these. The plan has specific provisions for a pandemic influenza event.

ii. Develop Policies

c. Assurance Process

i. Enforce Policies

ii. Provide Services

Indicator 10.c.i.1	Scoring
The EMSS, through the lead agency, has access to additional equipment, materials, and personnel for large-scale traumatic events.	0. Not known
	1. There is no surge capacity (prehospital, hospital, clinic, or coroner) built into the system for either smaller multi-patient events or mass casualty incidents.
	2. The EMSS has begun to identify additional equipment, materials, and personnel needed to respond to all-hazards events in light of new threats and emergencies. The EMSS lead agency has assessed medical resources at the state, regional and local levels for specialty care centers to include trauma and burn centers, pediatric and acute care facilities
	3. The EMSS lead agency, working with stakeholders, has in place additional equipment and materials for mass casualty incidents. A process to utilize additional personnel resources is in development. Testing of newly acquired equipment, material, and personnel resources has not yet been completed.
	4. The EMSS lead agency, in conjunction with stakeholders, has begun to test a method of deploying additional equipment, materials, and personnel during all-hazards events.
	5. The lead agency has acquired additional equipment and materials for both the prehospital and hospital response to all-hazards events. A deployment mechanism to share personnel resources has been developed and tested in both the prehospital and hospital settings (e.g., mutual aid, precredentialing of practitioners, and rapid assignment of privileges). The system routinely tests its capabilities in this area.

Indicator 10.c.i.2	Scoring
The EMSS, through the lead agency, ensures protective resources are available for prehospital providers and their families.	0. Not known
	1. There has been no assessment of need for protective resources (including vaccinations, prophylaxis, and personal protective equipment) for prehospital providers and their families. There is no system for ensuring availability of such protective resources.
	2. A system for ensuring protective resources is planned to be in place within the next year.
	3. There has been an assessment of need for protective resources (including vaccinations, prophylaxis, and personal protective equipment) for prehospital providers and their families. Some, but not all, of the resources identified as being needed have been made available.
	4. There has been an assessment of need for protective resources (including vaccinations, prophylaxis, and personal protective equipment) for prehospital providers and their families. All of the resources identified as being needed have been made available.
	5. There has been an assessment of need for protective resources (including vaccinations, prophylaxis, and personal protective equipment) for prehospital providers and their families. All of the resources identified as being needed have been made available. There is a system for routinely reassessing need for protective resources and for identifying new providers as they enter the EMSS.

iii. Evaluate

See 1.c.iii.1 on annual reporting

C. State EMS System Planning and Implementation Process

The following process is a suggestion for utilizing the Self-Assessment tool in a planning process that leads to establishing or updating a state EMSS plan. The Model Emergency Medical Services System Self-Assessment has been created to give a clear but relatively high level picture of the state's system status and to be as easy to administer as possible in a limited amount of time so that its results are attainable. The Model State EMS System description in section A, above, was derived from the highest scoring ("level 5") descriptions for the 75 indicators of the Self-Assessment. It is intended to create attainable goals. It is recognized, however, that states may elect an "ideal" or goal for some indicators that is different from the "level 5" description and therefore different than the model system. Step 3, below, accommodates this. If the lead agency wishes to use the model entirely, Step 3 can be omitted.

Step 1 – Name a planning committee.

It is recommended that the state's multidisciplinary EMSS board, or a similar ad hoc group representative of the EMSS subsystems, be utilized for the planning process.

Step 2 – Complete the Self-Assessment

State office staff should complete the Self-Assessment using the Excel score sheet embedded below in this document (just click on the icon). Place the "0" – "5" score in the space to the right of the corresponding indicator number. When all the scores have been entered for one of the ten subsystems, the correct average score for the subsystem will be listed in the yellow box at the bottom of that category. When all ten subsystem scores have been entered, a correct State System Average will be displayed in the gray box at the bottom of the sheet.



Excel Score Sheet

Step 3 – Establish "ideal state" goals

The completed Self-Assessment and the summary score should then be sent to the planning committee. The committee, using the same Self-Assessment entry tool, should complete the Self-Assessment, selecting the choice (0 – 5) that represents their opinion of what the improvement goal should be for that indicator. This gives the group the opportunity to select an "ideal state" that is less than "level 5" or to suggest other goals entirely. Committee members should then e-mail their completed Self-Assessments to the state office. While it would be possible to enter all the values provided and obtain an average "ideal state" level for each indicator, it is probably adequate to simply review all sheets and note which indicators have any entries of less than 5. These become subjects for the planning meeting.

Step 4 – Planning meeting

The planning group will be brought together for one face-to-face meeting lasting most of one day. During this meeting, the results of the Self-Assessment and “improvement goal/ideal state” exercises will be reviewed. Using an outside facilitator, the group will prioritize the subsystems and indicators to be addressed. If there were indicators that committee members thought should have an improvement goal or ideal state of other than that reflected by the description associated with the “level 5” state, consensus should be gained on this. The system used for prioritization should be consistent with the state’s planning prioritization system, if any. The prioritization should be scaled generally from “high” to “low”. Staff and the planning committee should discuss what, given the priorities identified, can realistically be achieved in the work cycle in which the plan will be pursued. Some targeted improvements may need to be held for future work cycles.

Step 5 – Create a planning outline

Following this meeting, staff will draft a planning outline the EMSS Plan based on the steering group input. The prioritization assignments should guide staff in assigning time-frames for completion. A sample template follows below. It should be completed primarily, or only, for those indicators in which work is targeted for the next work cycle.

- a. **Indicator Number** _____:
- b. **Priority Status:**_____
- c. **Current Status** (self-assessment level and descriptive statement):
- d. **Goal** (desired next self-assessment level step and descriptive statement):
- e. **Objective(s) to achieve the goal:**
- f. **Tasks to achieve objective:**
 - Who:
 - What:
 - When:
 - Where:
 - How:
 - Barriers:
 - Strategies for Overcoming Barriers:
 - Resources Required:

Finally, staff sends the EMSS planning draft to the steering group, beginning an iterative writing process by e-mail until a final draft acceptable to the planning committee is achieved. This becomes either a first EMSS plan or material with which to update an existing plan.

III. Appendices

A. References

1. *Emergency Medical Services at the Crossroads*; Committee on the Future of Emergency Care in the United States Health System; Board on Health Care Services; Institute of Medicine of the National Academies; p. 10; 2006
2. Ibid
3. <http://www.apcointl.org/frequency/siec/documents/documents.htm>
4. http://www.safecomprogram.gov/SAFECON/library/interoperabilitycaseestudies/1223_statewidecommunications.htm
5. McGinnis, KK; *Rural and Frontier EMS Agenda for the Future*; National Rural Health Association Press; 10/04; p. 62
6. Ibid; pp. 9-13

B. Model State EMS System Project Steering Group and Staff

Steering Group

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